

The Reis Library Allegheny College

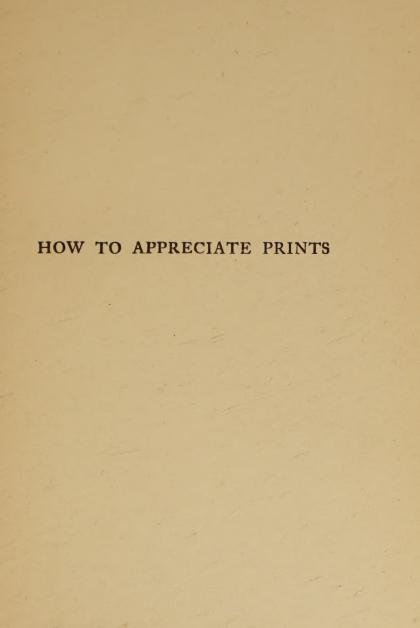


The Citt of The Carnegie Corporation

760 W439h

WITHDRAWN





HOW TO APPRECIATE PRINTS





THE ENGRAVER.

Dry-point by Whistler.

The print shows Riault, a wood engraver, at work. The wood block on which he is engraving rests on a pad before him; on the table lie some gravers.

(Courtesy of the New York Public Library Print Dept.)

760 W439h

HOW TO APPRECIATE PRINTS

BY

FRANK WEITENKAMPF

CURATOR OF PRINTS OF THE NEW YORK PUBLIC LIBRARY, AUTHOR OF "AMERICAN GRAPHIC ART," "ETCHING AND CONTEMPORARY LIFE," "FAMOUS PRINTS," ETC.

(Fourth Revised Edition)

NEW YORK
CHARLES SCRIBNER'S SONS
1929

GIFT OF CARNEGIF CORPORATION

COPYRIGHT, 1921, 1929, BY CHARLES SCRIBNER'S SONS

COPYRIGHT, 1908, BY MOFFAT, YARD AND COMPANY

Printed in the United States of America

All Rights Reserved

Published November, 1908
Second Printing, March, 1909
Third Printing, June, 1909
Fourth Printing, January, 1911
Fifth Printing, April, 1914
Sixth Printing, October, 1916
Seventh Printing, March, 1921
Eighth Printing, March, 1922
Tenth Printing, February, 1924
Eleventh Printing, December, 1925
Twelfth Printing, March, 1927
Thirteenth Printing, January, 1929
Fourteenth Printing, January, 1929



ALLEGHENY COLLEGE LIBRARY

CONTENTS

CHAPTER			PAGE
	A WORD BEFOREHAND	•	ix
I.	THE TASTE FOR PRINTS		I
II.	Etching	·•.	ΙΙ
III.	LINE ENGRAVING		53
IV.	Mezzotints		94
V.	AQUATINT AND OTHER TIN	T	
	Methods		130
VI.	STIPPLE AND OTHER DOT METHODS		145
VII.	Wood Engraving		162
VIII.	LITHOGRAPHY		204
IX.	PHOTOMECHANICAL PROCESSES		240
X.	Color Prints	•	246
XI.	Collecting	•	256
XII.	THE MAKING OF PRINTS	•	264
XIII.	CARE OF PRINTS	•	289
XIV.	THE SUBJECT-INTEREST	•	294
XV.	SOME SPECIALTIES	•	302
	A Word in Closing		313



LIST OF ILLUSTRATIONS

	PAGE
THE ENGRAVER. Dry-point by Whistler Frontispiece	
LION'S HEAD. Soft-ground Etching by Armand Point	20
Rembrandt Drawing. Etching by Rembrandt	26
THE THREE TREES. Etching by Rembrandt	27
MOTHER AND BABY. Dry-point by Mary Cassatt	32
BORDEAUX, SNOW EFFECT. Etching by Maxime Lalanne .	33
L'Abside de Notre Dame. Etching by Charles Meryon .	38
SHERE MILL POND. Etching by Sir Seymour Haden, P.R.E	39
St. MARTIN'S BRIDGE, SPAIN. Etching by Joseph Pennell .	42
WILLIAMSBURG (Brooklyn). Etching by Charles A. Platt .	43
WATER STREET, PHILADELPHIA. Etching by Charles Henry	
White	44
ELF AND BEAR. Etching and Aquatint by Max Klinger	45
CHRIST APPEARING TO MARY MAGDALENE. Line Engraving	
by Martin Schongauer	64
St. Jerome in His Study. Line Engraving by Albrecht Dürer.	65
THE RAT CATCHER. Line Engraving by Cornelis Visscher .	66
THE MASSACRE OF THE INNOCENTS. Line Engraving by Marc Antonio Raimondi	67
	07
PORTRAIT OF POMPONE DE BELLIÈVRE. Line Engraving by Robert Nanteuil, after Charles Le Brun	78
PORTRAIT OF CARDINAL BENTIVOGLIO. Line Engraving by Jean	•
Morin, after Van Dyck	79
LE MORCEAU DE MUSIQUE. Line Engraving by Nicholas	
Delaunay, after Jean Michel Moreau le Jeune	92
JOHN PHILPOT CURRAN. Mezzotint by John Raphael Smith, after Sir Thomas Lawrence	93
LADY BAMPFYLDE. Mezzotint by Thomas Watson, after Sir Joshua Reynolds	110
THE FIRST OF SEPTEMBER: EVENING. Mezzotint by William Ward, after George Morland	III

	PAGE
NORHAM CASTLE ON THE TWEED. Etching by J. M. W. Turner for the Mezzolint	116
NORHAM CASTLE ON THE TWEED. Drawn and Etched by J. M. W. Turner. Engraved by C. Turner (1816). Mezzoint.	116
SIR FRANCIS SEYMOUR HADEN AT 63. Mezzotint by Alphonse Legros.	117
A PLATE FROM FRANK SHORT'S "ON THE MAKING OF ETCHINGS"	130
MALA Noche (No. 36 of the Caprichos). Etching and Aquatint by Francisco Goya y Lucientes	131
THE HONOURABLE MISS BINGHAM. Stipple Engraving by F. Bartolozzi (1786)	148
One of the Hundred Views of Fujiyama. Woodblock Print by Hokusai	149
Examples of Stipple Engraving	150
A WOODCUT FROM HOLBEIN'S "DANCE OF DEATH"	170
ITALIAN WOODCUT BY AN UNKNOWN VENETIAN MASTER OF THE	
15TH CENTURY	172
THE ANNUNCIATION. By Geoffroy Tory. Woodcut	175
A WOOD ENGRAVING. By Thomas Bewick	178
FOREST OF FONTAINEBLEAU. Wood Engraving by Elbridge Kingsley, after Corot	188
WINTER (The Fox Hunt). Wood Engraving by Henry Wolf, after Winslow Homer	189
TIGRE ROYAL. Lithograph by Eugène Delacroix	214
NOCTURNAL REVIEW. Lithograph by Auguste Raffet	215
ENFONCÉ LAFAYETTE ATTRAPPE, MON VIEUX! Lithograph by Honoré Daumier	218
THE BEAR PIT IN THE ZOOLOGICAL GARDEN. Lithograph by Adolf von Menzel	
PORTRAIT OF TOLSTOI. Lithograph by Henri Lefort.	230
PORTRAIT OF TENNYSON. Lithograph by Alphonse Legros ,	231
LIMEHOUSE. Lithotint by J. A. M. Whistler	234
VIEW ON THE SEINE (A Paris quai). Lithograph by H. W. Ranger	235
PORTRAIT OF EDMOND DE GONCOURT (First state). Etching by Félix Bracquemond.	
PORTRAIT OF EDMOND DE GONCOURT (Seventh state)	269
An Impression from the Cancelled Plate of Whistler's Etching "Millbank".	

THE FOURTH EDITION

THE constantly increasing interest in the study and collecting of prints, which it is hoped this book has helped to foster, has made it necessary to go to press again.

Certain revisions and corrections that seemed desirable have been embodied. Several new illustrations have likewise been added, to elucidate the text.

F. W.



A WORD BEFOREHAND

To claim or attempt historical completeness for a book such as the present one would be preposterous. It would be futile to boil down all the facts in the many books on the subject into a compressed, full and dry record of names and dates. Numerous data are given, as a matter of course, because they illustrate various general principles on which the appreciation of prints is based. Æsthetic criteria are inevitably influenced by historical and local association and by technical considerations, and these points must therefore be brought out. But the emphasis is on appreciation, and the end in view will be fully realized if the reader is helped to see, whether he eventually agrees or not with the opinions expressed. The object is not to furnish cut-and-dried invariable rules, but to aid in the development of a critical spirit paired with liberal-mindedness.

The various chapters are as independent of each other as they can be (considering the interdependence of the arts) and can therefore be read or consulted separately. The index forms a key to all essential facts, including certain topics to which a separate chapter could not be devoted, particularly book illustration, more or less extended references to which occur in nearly every chapter.



CHAPTER I

THE TASTE FOR PRINTS

Nor a few persons who are fond of pictures appear diffident before prints. They seem to fear that the whole subject is far beyond them, and make little or no effort to acquire a closer acquaintance with a form of art that offers most varied pleasures to those who have come to appreciate it in one phase or another. Anything worth striving for or learning is above us until we have succeeded in attaining a closer view and a better understanding of it. Timidity in the face of this subject, then, is not warranted. Rather an openminded desire to learn.

The list of books dealing with prints is not a small one, and it includes some excellent guides for the collector; yet some of these, by their very mass of historical and technical data, and their æsthetic attitude, presuppose considerable information and a high development of taste in the reader. This may dishearten those who do not fully understand what they want, those who need the friendly hand of guidance before they are ready for the formal lecture of the expert. There are things that cannot be taught well in print, things which, after all, the reader must test for himself. But he can be put on the right track. He can be helped to help himself, to see all he can in the right

¹ Two bibliographies of the subject have been issued in recent years: the portly quarto by Howard C. Levis (1912), with "Supplement and Index" (1913), and G. Bourcard's "Graveurs et Gravures" (1910). See also "Prints and Their Production" (N. Y. Public Library, 1916).

way and to read the right books at the right time. And that is what is attempted in the present book.

There are various grades of art and of art lovers. "The earth has room for all," as Schiller said.

The first step in the development of a love for pictures is the interest in subject; the second, the interest in realistic treatment. These two points are the ones which attract most persons when confronted with pictures. They are a natural and proper expression, based on the attitude of man toward his fellow-man and the rest of nature. They animated the men of the stone age, scratching representations of animals on a piece of bone, as they do the schoolboy making rude incursions into art on his slate or the fly-leaf of his schoolbook. Their popularity is exemplified in the attitude of the crowds that gather before certain paintings in our large permanent art galleries, such as the Metropolitan Museum—paintings that tell stories, war-scenes, anecdotal genre. To say that this whole movement is wrong, or shows false taste, simply because it represents a form of art not now in vogue among the foremost artists, is really a mistake. As I said, there are various grades of art. There are different points of view and the supercilious attitude is always out of order.

But humanity, in its acquisition of knowledge, its hopes, its aspirations, its ideals, is in a state of steady development. In art, it is the personal expression of the artist, his individuality—shown not only in mere tricks of style, but in his state of mind, his attitude toward the world about him—which counts most in the end. And that is why art in any form is not a

matter only of mere copying of facts. The line to be drawn is not always easy to define, perhaps. But one may best regard some extreme examples. The demand for subject and realism found strong expression in the vogue enjoyed by the chromos years ago. About the same class of people who made the popularity of these color prints at that time, later got the original land-scape etching "at \$2.37, framed."

On the whole, this marks a step in advance, if only for the reason that the original etching, though it be a poor one, appeals to a more highly developed taste because it often lacks the strong appeal of a story told, of a subject arousing human interest; and because, being simply in black-and-white, it lacks also the strong aid to the less trained imagination which color gives. Of course, there are good chromos and poor etchings.

Obvious and cheap realism is the most easily understood. The "fiddle on the barn door" draws crowds who complacently note the well-painted rusty hinges and the astonishingly deceptive fly crawling on the wood. This delight in counting every wrinkle on a face, all the buttons on a coat, is born of the spirit which prompts the schoolboy to draw a face in profile with two eyes on one side. "A man has two eyes, hasn't he?"

Now, the absolute rendering of every detail is not necessary, and many of us believe that it is not the object of the highest form of art. We expect a writer to leave some ink in the well and give some play to our imagination. The artist is not a camera. He is a being with a soul who presents nature to us with an

infusion of his own personality. "Art is nature seen through a soul," said Corot, the French landscape painter. Others have expressed the same thought in other words. As we advance in our knowledge and appreciation of prints, we will more and more value these qualities of personality. And not a small part of our pleasure will be due to delight in the technical handling of the work before us. For the artist's expression and his manner of expressing himself are inseparable.

In the handling of the medium, that is, the process of reproduction (engraving, etching, lithography), all the formative influences in an artist's make-up find expression: nationality, surroundings, his masters, his idols, his tastes. That is why technique counts for so very much in our appreciation of prints. And that is why the interest in methods of working is apt to outweigh the dryness of technical descriptions. Technique is expressed by craftsmanship, and there is usually a very proper curiosity concerning the means to this end. For the tool by which a work of art is produced, and the material in which it is produced. inevitably impose their stamp on the artistic result, through their very nature and through the manner in which they have to be handled. Etching-needle and copper, crayon and stone, graver and wood, pencil and paper, are media that have each its field, its proper limits of expression, beyond which it is unwise to force them. We must not, then, expect of any medium or process what it cannot give. We must not look in the etching for the range of color suggestion of the lithograph, the detailed formality of the line engraving, the richness of the mezzotint, the tone of the modern woodengraving. Each medium has its advantages and its disadvantages. Each has its peculiar claim on our attention. The individual liberty of the artist is to be respected. The master will not be bound by fashions in execution, mannerisms in manual dexterity formulated by the cleverness of handicraftsmen. But he will assuredly respect the nature of the medium, and aim only at effects to the production of which it is adapted.

The best prints do not appeal with full force to the majority of those whom the painting attracts, because they represent a specialized sort of taste. This taste may be inborn in its inception, but it is an acquired taste in its development. This is only natural. Consider that the cheapest chromo has certain evident elements of realism, such as color and detail, that appeal strongly and directly. On the other hand, in the etching, a highly developed form of art, all unnecessary detail is usually omitted. Furthermore, the etching is expressed in black lines, and nature has no lines. The line is a convention, which is carried to its extreme potentiality where it is used, as in the slighter etchings of Whistler, or Pennell, or Platt, to give summary indications or impressions, and not to express completeness of tones, or of light and shade. The function of this form of art is suggestion, stimulation of fancy, the conveying of impressions from one mind to another. But, while recognizing the fact that the appreciation of etchings calls for a training of the perceptive faculties, we need not therefore turn from this form of art as from something beyond us. The Japanese color-print is another example of a highly developed art-sense. But the fact that it seems all "Greek" at first need not discourage.

When other things in life attract us on account of possible amusement (as a difficult game such as chess, or whist, or *Skat*) or of possible profit (as some profession or trade), we strive to master them. Why not so here? The pupil who enters school cannot read and understand Shakespeare, but he can learn to do so. Fields of pure delight will be opened to him who will only have the will to see.

The term "prints" covers many things, from the cheap chromo to the ten-thousand-dollar etching by Rembrandt. It can be applied to the magazine or book illustration that gives pleasure to large numbers, and to the choice and rare products of art that delight the most highly cultured amateur. It describes the printed picture that we enjoy for purely artistic reasons as well as that in which the antiquarian or historic interest overshadows all else. The collector of historical prints may pay a good price for an engraving that is poor as a work of art but rare as a portrait; for the interest in prints is based not only on various degrees of artistic understanding and on different artistic standpoints, but also on aspects not necessarily artistic. And these various interests all play their part in the appreciation of prints.

But primarily we have to do with them as art products purely. And, as such, they offer three elements of enjoyment, as Wessely once said; namely, the beauty of the engraving on the plate or block, the beauty of the impression on paper taken therefrom, and the beauty of the condition of this impression or print.

The collector of etchings by Whistler, Haden, Meryon, Legros, Cameron and other masters of the art will perhaps turn up his nose at reproductive etchings. There is an instinctive feeling that the true province of the etcher is the summary expression of original ideas and not the painstaking reproduction of a painting by another artist. Undoubtedly the "reproductive etcher" has sinned much. But so has also the "original etcher." For the slick potboiler was bound to come into evidence when "etching" first became a name to conjure with and a certain popularity of the art caused it to be "worked for all it was worth." "Prove all things, hold fast that which is good" is as good a rule as ever. There are some beautiful examples of reproductive etching, by men such as Waltner, Unger, Flameng and Chauvel, to name but a few. And again, Jacquemart has drawn on the copper pictures of glass and silverware which are exquisite and worth many "original etchings."

Pursuing this question of the relative merits of reproductive and original work, we find that, on the other hand, collectors are so eager for fine mezzotints that some of these prints are bringing excessive prices in the auction rooms. Yet the mezzotint process has been employed essentially as a reproductive one. Original mezzotints are not numerous, and are not the ones that bring the highest prices. It is also well to remember that that which is most sought after in life is not inevitably the best. In collecting, too, we may strike fashions and fads, and the fad is not necessarily in good taste.

Looking for the individuality of the artist in prints

will, of course, lead eventually to original work. For it is evident that an artist will give fuller expression to his own self in an original etching or lithograph than when he is fettered by the necessity of interpreting the work of another and honestly tries to remain loyal to the latter.

Meanwhile, as you seek for the best, remain true to yourself. If, after careful study, you feel drawn to any specialty or any one artist, have the courage of your convictions. Do not think that you must follow either the crowd or the select few. Only make it a point to pick out the best in the specialty that strikes your fancy. If you find you like reproductive etchings, seek out the best work of the best men. Enjoy it, buy it if you can and want to. Train your eye to see the good and bad. For much of the beauty of an etching, for example, depends on the manner in which it is printed and on the state of the plate when it is printed. Impressions from a badly-worn plate are an eyesore. I placed a fine impression of an etching by Rajon, after a "Reader," by Meissonier, beside one apparently taken from the plate when badly worn and published about fifty years ago in the American edition of a well-known British art periodical. The difference was remarkable, and it was pitiful to see that such a travesty of the original had been foisted on our public with all the pomp of authority. Which shows that the name of a good man on your print does not necessarily mean that you have "a good thing," though the agent or other seller be ever so glib.

To repeat, then, do not be dismayed by the attitude of the superior person. Admire frankly what pleases

you, always assuming that you have made your choice after due deliberation and for good reason. And if. in the course of time, you should outgrow your tastes or change your attitude, you can afford to do so with entire satisfaction to yourself. You have had pure, elevating enjoyment, from what you admired hitherto, which is certainly immeasurably better than if you had kept away from the whole business on account of misplaced diffidence. Of course, there is no royal road to any knowledge. And, particularly, do not expect the present handbook, or any other general one, to answer questions of a very special nature. When you have really arrived at that point you need special literature—histories of a particular school or nationality, monographs on individual artists, or works on the medium (mezzotint, etching, etc.) which appeals to your taste and fancy. One cannot build a pons asinorum to enable you absolutely to tell the bad from the good, any more than a receiving teller can learn to tell counterfeit money except by handling it. But facts can be set down which will give you proper preparation for that which you will do with all the more zest and pleasure because of such preparation. And that is, first to see, and second to see, and third to see yet more. Look at all the prints you can, with the intention to learn and understand and enjoy. Opportunities are numerous. There are public print rooms in Washington, Boston, Cambridge, New York, Philadelphia, Cleveland, Buffalo, Chicago and smaller public collections elsewhere. Exhibitions are arranged in various cities by art institutions, associations and schools, by museums, public print

rooms, book-clubs and various print-dealers. Catalogues are issued for these shows which are records of permanent value, and this applies to the hand lists issued by certain dealers as well as to the elaborate publications of such clubs as the Grolier of New York, the Caxton of Chicago, or the Burlington Fine Arts of London. A look at the list of exhibitions that have been arranged in recent years by clubs such as those mentioned, indicates a remarkably wide field of interest, with an appeal to every variety of cultivated taste in print matters.

There are few pleasures to be had with such a very little outlay of time and money as this. And all this is there for him who will take it.

To give a list of masterpieces, like a list of one hundred best books, duly labeled and described, may be convenient to him who likes to have his life mapped out for him on the Cook's tour principle, regulating his daily meals by the menu published in his favorite daily, and "doing as the others do" in everything. In the thoughtful one a superabundance of examples given may in time rouse the query: Why was not that one named instead of this one?

If the writer, apart from citing certain unquestioned cases of absolute merit, exercises the right of personal choice, he is bound to stimulate the reader to think for himself, to draw comparisons, to use his own eyes.

And that is the principal thing to be attained.

CHAPTER II

ETCHING

It is confidently stated that the time is past when people think that to etch is to make a pen drawing. Yet I have frequently been asked by persons who showed a decided appreciation of etchings, "Now, are these the originals or copies?" In one case this question was put by a man who, without previous art training, enjoyed Whistler's etchings because "they told so much with such few lines." Not a bad characterization, that. It took only a few words to set him straight as to the manner in which etchings were produced, and to show him that they were neither originals nor copies in the sense in which he used those terms.

Etching is an art of the line. In that respect it is like line engraving on copper. Used in the same field as the latter, to reproduce paintings, it can be handled so as to produce tones in which the line is lost. But as a "painter art," as a medium for original expression, it does not aim at such completeness of effect. It is, in fact, often comparatively slight in execution, summary in statement, telling its story in few words. Its strength lies in indication, not elaboration; flexibility, not rigidity; the possibility of omission, not the necessity of adding detail; the power of giving a maximum of expression, with a minimum of means.

The engraved line is precise, formal, the etched line irregular, free. The engraved line is produced by a tool pushed forward through the copper, by an effort which limits freedom of movement. The etched line is produced by acid biting somewhat irregularly along a channel made by a steel point handled almost as lightly as a pencil, scratching through a waxy layer, which it needs no extra force to pierce, moving freely, with a resultant unhampered response to the lightest touch of the fingers. Line engraving is a slow process. Etching is rapid, spontaneous. It calls for much nicety of judgment and knowledge of process in the "biting" with acid, which follows the initial step of actual drawing. But in this initial step, in the actual placing of the design, it responds easily, freely and rapidly to the intention and touch of the artist.

Etching practiced directly by the artist as a so-called "painter" art or autographic art, with no engraver as an intermediary between him and the public, is an open, personal manifestation of his design and intention, with the full impress of his character.

The process of pure etching is this: The polished side of a copper plate (zinc is occasionally used) is covered with a thin layer of a composition known as "etching ground," which may be composed of white wax, gum mastic and asphaltum, for example. This ground is smoked over, usually by means of wax tapers twisted together, which process is amusingly illustrated in a photograph which shows Félix Buhot posing in the very act. Upon the plate thus prepared, the design is drawn with a steel point, the "etching needle," which, passing through the "ground," does

not cut into the copper but simply lays it bare. The copper at the bottom of the lines thus drawn shines out in contrast with the smoked ground. The plate is subjected to the action of acid, usually by being placed in a "bath" of the acid, the back of the plate being protected by a coat of varnish. The acid eats into the copper where it has been laid bare by the needle, and does not affect it where it is still covered by the etching ground. The plate is then taken out of the acid and the remaining "ground" removed. Ink is applied to the surface of the plate, then rubbed off, except where it has entered the etched lines.

The printing is done on a copper-plate press, the etched plate and paper being laid on the bed or plate of the press and drawn with the same between revolving cylinders or rollers, on the principle of a mangle. By this process, the ink is drawn out of the lines and transferred to the paper. Passing a finger over the surface of the print thus produced discloses the ink lying in slight ridges; so that, when the lines have been very deeply bitten, these ridges are comparatively thick, and there may even be corresponding grooves in the back of the paper, showing that the pressure has actually forced the paper into the etched lines. This is well illustrated in certain plates of Turner's "Liber Studiorum," or in Haden's "Calais Pier" (the large plate), after Turner.

In the production of the final effect, very much depends on the biting and inking. It is obvious that, if the acid is allowed to act uniformly on all parts of the plate, all the lines will be bitten to the same depth and will print equally heavy and dark. To offset this, the method known as "stopping-out" is employed. The plate is left in the bath long enough for the acid to bite properly the lines which are to print most faintly and delicately. It is then taken out, and a so-called "stopping-out varnish" (Brunswick black, or asphaltum) is applied over the lines which have thus been subjected long enough to the acid, after which it is again placed in the bath. The acid now acts only on those portions not protected by the stopping-out varnish. The process is repeated for the portions which are to print somewhat heavier than the first, most delicate set of lines, and so on, according to desire, until the lines last left unprotected, which have, of course, been acted upon through all the successive immersions of the plate in the acid, will print darkest. process of stopping-out, as well as the application of the burnisher to rub down lines, can result in much variety of effect.

In Whistler's "Kitchen" (No. 19 in Wedmore's catalogue of his work), or his "Vieille aux Loques" (No. 14), or "La Marchande de Moutarde" (16), the faint, grayish lines of the dishes and the flesh portions contrast with the heavy markings of the adjacent shadows. A similar difference in strength of lines appears in Haden's "Shere Mill Pond," or in Pennell's "St. James' Palace" and "Spitalfields Church."

There is another method of arriving at the same result; to place the plate, covered with its "etching ground," in the bath, and to draw upon it with the needle in this position. Each line, as soon as drawn, lays bare so much of the copper, which is immediately attacked by the acid. It is therefore necessary that

¹ Nos. 10, 14, 16 are Nos. 24, 21 and 22, respectively, in E. G. Kennedy's catalogue as well as Howard Mansfield's.

those lines be drawn first which are to print most heavily, then those that are to appear a little less dark, and so on, the most delicate ones being put in last. This method calls for colossal sureness on the part of the etcher, an absolute knowledge of the action of the acid, a complete mental picture of his design, so that he may know just what lines to put down and in what sequence. Hence, its use is rare.

If it is desired to add work to a plate already bitten, that can be done either by laying a fresh ground (transparent, this time) on the plate and proceeding as before, or by scratching the lines with the point into the bare copper, which process, needing no acid, is known as "dry-point."

If, after a plate has been inked, the ink on the surface were thoroughly wiped off,—which is done with rags and finally with the ball of the hand,—the result would be such as can be seen on a visiting card, where the black letters appear on a perfectly white ground. Even the most "clean-wiped" etching is rarely quite as clean-wiped as that, however. The space covered by the etching is nearly always a little darker than the margin of white paper around it. This is caused by a thin film of ink covering the etched portion of the plate. Sometimes this film of ink, this thin grayish tone, is so slight that the lines of the etching stand out sharply from the background of paper. But in many cases more ink is left on the plate, so that the spaces between the lines are more or less filled up with a tone that softens the comparative sharpness of the bitten line 1

The ink is not usually left in a tint of dead uniformThe later states of Rembrandt's "Entombment" were usually printed
with a dark tint of ink.

ity, but varies in strength. The importance of this film of ink can even become paramount. In Whistler's "Nocturne-Salute" (No. 199),* and "Nocturne-Shipping" (No. 194), there are but a few lines as a sort of skeleton support, while ink left on the plate gives an effect which varies, of course, with each impression. Mielatz's "Passing Storm" is built up similarly, though not to the same extent.

"What is the secret of etching as I obtain it?" said Lepic. "It is the use of ink and rag. With these two one can obtain everything from a plate. I am master before my plate as before my canvas. I can transform all subjects according to my fancy, modify their effects."

And he demonstrated this theory, says Beraldi, by printing a view on the banks of the Escaut in eighty-five different manners, obtaining from the same plate in turn day and night effects, sunset, moonrise, etc.

Various etchers, such as Martial, Herkomer, Lalanne, Hamerton and Short, have published manuals embodying the results of experiments in the composition of grounds, in biting and in printing.

There are niceties of manipulation to gain farther varieties of effect. One of these is known as retroussage. This consists in a peculiar handling of rags, when wiping the surface of the plate, by which some ink is lifted out of the etched lines on to the plate. Or again, rags of a certain grain are used, producing a peculiar scratched effect in the film of ink. Herkomer has in his book a portrait printed in visiting-card style, and again retroussaged, "to show how much printing can do for an etching." Paper, too,

^{*}Wedmore 194 and 199 are Kennedy 223 and 226, and Mansfield 220 and 223, respectively.

is an important factor. The delight is great of the etcher who has managed to pick up in some second-hand shop an old, hardly used account-book of old French or Dutch hand-made paper.

All of this shows that the printing of an etching implies a full understanding of the artist's intentions, and often is a decided expression of personality. Not a few artists are their own printers. Whistler often worked the press, and there is an interesting photograph, taken not very long before his death, which shows him standing at the press, studying a proof just pulled.

All the methods described are within the province of pure etching. But there are many other ways of producing effects. Dry-point may be used to advantage in portions of the plate. Tools and processes used in various branches of engraving are borrowed; lines are strengthened with the burin (graver), shadows are intensified with the roulette (a small, toothed wheel), for example by Boissieu, tones are produced by means of aquatint, and by other processes noted in the chapter on aquatint. Herkomer finds that Meryon "used the burin in finishing his bitten work with a marvelous skill; no better example can be found of the harmonious combination of the two."

"Foul biting" (the spotty action of the acid at places where the ground has not been properly laid), sometimes a fortuitous and damaging effect, is occasionally applied with forethought, instances being furnished by Jacque, Yale and Mielatz. There are many such extraneous effects to be found, produced by ways and means beyond the limits of absolute etching.

Félix Buhot was a veritable juggler with processes; his etchings form a study of clever manipulation. Guérard also experimented much, and Bracquemond has tried all manner of processes, among them the Vial, which "consists in letting acid act on a plate of steel that has been drawn upon with lithographic ink." Charles Jacque, who produced many etchings, used various processes to gain quick results, and occasionally even went to the questionable extreme of employing the ruling machine. That is a contrivance used in modern line engraving, which rules parallel lines the same distance from each other, producing a dead mechanical effect, and employed especially for skies. L. M. Yale used a bundle of needles, instead of the ordinary etching point, on foreground and trees in one of his plates (No. 44).

"It would be curious to ascertain," says a French critic, in re Jacquemart's etchings of book-bindings, by what new and ingenious processes, by what ruses and stratagems, one might say, the artist has been able to obtain certain astonishing results of exactitude and ocular deception: etching mixed with aquatint, rubbing, graining and stippling, reddish and black inks, the simultaneous employment of old rags, pieces of cloth, waxing brushes and other similar barbarous instruments."

An artist's experiments on copper may at times be of such a nature as to baffle the expert's attempt to ascertain how a certain effect was attained. In such a case it is enough to enjoy the result—if it is one to be enjoyed—without worrying about the cause.

Sir Seymour Haden, discrediting the statement that

Rembrandt employed mysterious contrivances to produce much of his success, expressed himself strongly against the use of such aids. Said he: "All the great painter-engravers, in common with all great artists, worked simply and with the simplest tools. It is only the mechanical engraver and copyist who depends for what he calls his 'quality' on a multiplicity of instrumental aids which, in fact, do the work for him—the object of the whole of them being to make that work as easy to an assistant as to the engraver himself, and its inevitable effect to reduce that which was once an art to the level of a métier."

It must not be overlooked, however, that there is after all a decided difference between the use of the ruling machine to make a mechanical sky with little trouble, and the employment of various methods not to save time or labor but to arrive at certain effects. Experiments are not illegitimate, even if unsuccessful.

Dry-point (pointe sèche, Kaltnadel), referred to before, means the use of a needle¹ directly on the bare copper, unprotected by any "ground." The lines in this case are scratched directly into the copper, so that no acid bath is used. As the needle digs furrows in the plate, it throws up a ridge of metal on the side, technically known as "burr." This ridge, or "burr," in printing, yields the rich, velvety blacks characteristic of dry-point work, and found in the work of the old masters as well as in that of modern artists. There is a possibility of abusing this effect. Too much inky blackness of shadow, with no translucency, may become wearisome through an inartistic heavy spottiness. Unfortunately, this ridge is soon crushed

^{1&}quot;Sharpened in a peculiar manner."—P. G. Hamerton.
"Sharpened at a more obtuse angle than for etching."—Note, South Kensington Museum exhibition.

[&]quot;A stronger and heavier point, very hard"—J. Pennell, "The Graphic Arts," pp. 191-2.

down in the press, so that it no longer holds ink properly. Consequently the plate yields only a small number of good impressions.

There is a sort of affinity between dry-point and mezzotint. It is interesting to note that Sir Seymour Haden, in his lecture on "Rembrandt True and



Soft-ground etching by Armand Point.

The original is printed in red ink, which further carries out the suggestion of a red chalk drawing.

False," states that in the first part of Rembrandt's career his etchings were bitten in, in the second they were afterward touched up by dry-point, and in the last he depended on dry-point alone.

Soft-ground etching is a more recently developed phase of the art. For this, the "ground" is mixed with tallow in order to make it soft. On top of this ground a piece of paper is laid, and on this paper the drawing is made with a pencil. Wherever the

pencil touches, the ground will adhere to the paper and come off with it when it is lifted up. The resultant lines, subjected in the usual way to the action of acid, print as broken lines, with the effect of a pencil drawing on coarse-grained paper. In the late eighteenth and early nineteenth centuries this method was used for portraits, which had some similarity to the pale lithographs of that time. The plates in "Liber Studiorum" (1838), by John Sell Cotman, are done in soft ground etching, which was employed also by Samuel Prout. "Interior of a Church," No. 70 in J. M. W. Turner's "Liber Studiorum," was mezzotinted on a soft-ground etching, and in later years Frank Short has worked in this medium, producing "Maxwell Bank," among other plates. It was occasionally used by Jacque, and considerably by Louis Marvy. Rops and other artists are represented by some plates in A. Delâtre's pamphlet on "Soft Ground" (Vernis mou). Max Liebermann has employed the medium, and it has furthermore been used in the United States by J. D. Smillie, C. A. Vanderhoof, C. F. W. Mielatz, whose "Road to the Beach" (1890) is executed in soft ground, roulette, and aquatint, Henry Farrer, Kruseman van Elten and A. T. Millar.

Thus, the technical difficulties and possibilities in etching are manifold.

Comparison of the works of the many whose names are known in the annals of etching will show the suppleness and expressiveness of the art, despite its apparent limitations. Artists of the most varied styles and temperaments, of widely different national and

individual characteristics, have sought and found expression with the etching-needle; some with greater success, some with less, but each presenting his view, giving utterance to his personality. In some cases we have simply a painter making notes in another medium, using it as a vehicle for sketching without going too deeply into its mysteries or intricacies of technical possibilities. Or we see an artist honestly and cleverly working within prescribed lines imposed by the style of some more noted etcher who has particularly influenced him. In fact, while there are many who attract us by choice of subject, or some charm of treatment or grace of line or errant mood or technical facility, the really great masters of the art, whose personality is indelibly and unmistakably impressed upon their productions, are comparatively few.

Furthermore, the artist who considers such a serious business as etching or illustrating or even caricaturing merely as a bit of by-play, as an occasional artistic drudgery necessary for boiling the pot, is not the one that arrives at complete and self-satisfying attainment. A predisposition of artistic character is one of the prime essentials to success in such a specialty. Artists such as Rembrandt, Whistler, Haden, Meryon, Zorn, differing in degree, perhaps, and certainly in kind, in viewpoint and mental make-up, have this in common, that they give expression to their individuality with consummate skill and with a proper adjustment of the means they employ to the end they have in view.

Etching is etching. It is nothing else.

If a clever illustrator blithely attacks the copper in the

same manner in which he executes a pen drawing, he will miss his point. If the painter uses the etching needle simply to make a sketch as he would with pencil, he will fail to draw from it the best it can give. The peculiar quality of the etching, its particular charm of suggestion, is somewhat intangible, perhaps, evading elementary analysis. But it will be brought out in the study of the works of the most noted exponents of the possibilities of this art.

Rembrandt is generally considered the master of the art, the representative etcher. It is not necessary to go into the comparative claim set up for Whistler. They were different natures, and it is just as well to give each his due without any dispute as to preeminence. Rembrandt in his etchings, as in his paintings, often strove for strong effects of light and shade, chiaroscuro as it is called, and he shows big qualities in his work on the copper as in that with brush and color. But we must not feel appalled at this gigantic figure looming up through the centuries. Let us rather approach him with open eyes, ready to meet him half-way. It will be to find that he, too, had his faults, and to like him all the better for it. We have men to-day who can draw some details more precisely than Rembrandt. Many a young artist might scorn to draw an architectural interior as poorly as did Rembrandt in some of his etchings.

And yet, if the work of such a capable and clever draughtsman is placed beside that of Rembrandt, what a difference! To see it, you must, of course, free your attitude from any admiration of mere cleanness of line and neatness of statement. It is well to re-

member, also, that a statement in speech may be erroneous, yet delivered in so decided and positive a tone as to carry conviction to those not conversant with the subject. So, too, in art. Compare the lines of a petty realist with those of Rembrandt, put down roughly, vigorously, delicately, apparently slightingly, as seemed most fit in each case, with a craftsmanship shown only by him who is so entirely sure of himself that he knows just what to say and how to say it, and can leave out all but the most essential facts. Rembrandt practiced well the arts of suggestion and omission, leaving the imagination of the spectator to do much of the work.

Rembrandt's range is wide and his power of expression varied. The same hand that dashed off the not very important little sketch "Six's Bridge" (an impromptu done, according to the familiar anecdote, while Burgomaster Six's servant had run out to get some mustard, dinner being already on the table), produced also the finely worked-out portrait of Burgomaster Six, standing reading with his back to a window. This last is a beautiful print, with its transparent shadows of an almost mezzotint-like effect, but the work on the plate is so delicate, especially on the face. that not many good impressions are met with. Rembrandt's variety of treatment is always a joy. The summary, crisp manner in which he sets down a landscape—such as the one "with a Ruined Tower" or the "Goldweigher's Field," or "Landscape with an Obelisk," or "Village with a Square Tower"—in a few well-chosen lines is in interesting contrast to the use of many lines to produce solid masses of shadow. We

see the latter, for example, in his portrait of himself (he was his own most faithful and most used model), drawing at a window. A delightful presentation of personality this is, a sympathetic study of character that appeals to us because it meets our human sympathies.

His portraits and landscapes form, on the whole, perhaps the best and most interesting portion of his work, and that least touched by successive cataloguers in their task of eliminating from the list of his etchings those of less than doubtful authenticity. I should think that they would certainly appeal most strongly to those who are first becoming acquainted, so to speak, with Rembrandt. Especially the portraits, among which, beside those already mentioned, are those of Clement de Jonghe, the printseller; Jacob Hareng; Dr. Ephraim Bonus (which it is interesting to compare, as a character-study, with the same subject portrayed by J. Lievens); John Lutma, the goldsmith: Cornelius Anslo, the celebrated preacher: Jan Sylvius: the picture of his mother, seated, looking to the right (beautiful in its summary indication of the texture of flesh, dress, etc., by varying the handling of the point); and the picture of himself "leaning on a Stone Sill," a splendid example of etching.

"The difference between these portraits and too many modern ones," says Hamerton ("The Etchings of Rembrandt," London, 1894), "is that these have dignity without pretension, whereas the others have pretension without dignity."

Quite recently some critic asserted that, if Whistler had etched landscapes instead of street scenes, he

would perforce have done them in the style of Rembrandt, who had practically said the last word in that specialty. In his landscape etchings, says Atherton Curtis, "he is as modern as the men of the nineteenth century themselves."

It would be well to take up the study of these portraits and landscapes before going too deeply into the other subjects.

A plate like the "Christ Healing the Sick" (known as the "Hundred Guilder Print" because Rembrandt sold a copy of it for that amount) is not so easily understood at first. In fact, it is not advisable that one who has not studied Rembrandt before should go through all of his works at once. That would be apt to produce a case of artistic indigestion. There are things in some of his plates that might offend the untrained eve, uncouth models at sight of whom the inexperienced might ask, "Why was this drawn?" Then, too, some of his etchings are simple memoranda, a matter not infrequently encountered in the etched work of painters. Furthermore, he experimented and his art developed very noticeably, so that his etchings are not at all of uniform excellence either as regards command of the medium or power in drawing. They display great diversity of manner. Much has been written about Rembrandt, but a series of articles by C. J. Holmes on "The Development of Rembrandt as an Etcher," in the Burlington Magazine, 1906, particularly emphasizes this matter of artistic growth.

To begin with, one might study the plates I have mentioned, and others, such as "Faust," "An Old Woman Sleeping," some of the fine heads of old men,



REMBRANDT DRAWING.

Etching by Rembrandt.
(Middleton 160, Bartsch 22, Blanc 235.)



"The Mountebank," "Death of the Virgin" (which Hamerton pronounces the greatest of Rembrandt's works for "nobility and grandeur of conception, and beauty of style in execution"), "The Three Trees" (a well-known and popular landscape subject of dramatic effect), and, later on, some of the scriptural subjects which, as Lippmann said, "appear like weird visions wrapped in mysterious light: witness his powerful crucifixion known as 'The Three Crosses.'"

Or, if the originals are not to be seen, access may be had to good reproductions, such as those issued by Amand Durand, or the ones accompanying the books on Rembrandt by Dutuit or Blanc in the larger public libraries. If they are studied with a desire to understand, the strong personality, the big heart and soul that speak to you from out of these works will speedily be felt and appreciated. It has been pointed out by one authority that "in such matters as the use of different qualities of shade, thickness of line and depths of biting, the cleverest professional etcher" of the seventies and eighties was the superior of Rembrandt; the latter's supremacy is mental. It was a supreme power that could endue a not at all faultless plate such as "David on His Knees" with a "pathetic intensity of sentiment."

Rembrandt is a colossal figure in art, one might say, similar to Beethoven in music. His influence has been far-reaching and continues. He had numerous followers, imitators and copiers—Ferdinard Bol, Jan Lievens, J. G. Van Vliet, and others in his own century. Later, J. P. Norblin, that Frenchman in Poland; G. F. Schmidt, Marie Lecomte, Castiglione, Wil-

liam Baillie, Thomas Worlidge and Andrew Geddes imitated him with more or less success.

It will not do to become impressed with the idea, after all that has been said here and by others, that, because Rembrandt was a giant, others have no right to be heard, especially moderns. The pre-eminence of a Shakespeare or a Goethe does not prevent us from enjoying the writings of lesser lights. We have many artists of ability even in our own day, and more than one of powerful mastery, who have had the ages back of them to learn from and build on. In pure technique the best of them show a decided advance over former times. Some of them may even supply us with beauties or specialties that were beyond a greater man. Rembrandt, for instance, to judge by his landscape etchings, had a knowledge of water that was limited as compared with that attained by modern artists such as Haden. Storm van 's Gravesande, or C. A. Platt.

The number of Rembrandt's etchings is comparatively limited, but there is plenty of modern work worthy of our attention, and within the means of not a few of us who may desire not only to enjoy but to possess.

Of course, evidence of influence of master minds cannot be avoided. But neither can it be avoided in the work of the contemporaries of Rembrandt and the other few who hold pre-eminence. In fact, there is apt to be more downright copying or imitation on the part of pupils or followers of a man like Rembrandt than there is in the work of those who come over two centuries after, with whom it is rather a

matter of assimilation of certain principles of action, certain methods of expression stamped upon the practice of etching; as, one might say, an inventor or scientific discoverer building on, or incorporating, some known principles in attaining his results; or a modern philosopher dilating on and following to their ultimate consequences some theories propounded by his predecessors.

Certain names in Rembrandt's century stand out prominently above the rest, because of more or less powerfully expressed individuality.

The landscapes of Claude, the scenes from peasant life by Ostade, the animal pieces by Berghem, the less elegant but clear-sighted Paul Potter and Karel Du Jardin, the portraits of Van Dyck—these prints remain among the most delightful that have come down to us from that period. And there are other names: the Van de Veldes, Everdingen, Ruysdael, Waterloo, Zeeman—a long list that offers many pleasant bypaths to the student of the art. Even the minor men have their interest, their own particular note,—mon verre est petit, mais je bois dans mon verre. And where a man's art is imitative or adaptative, he at least helps to accentuate the influence of some greater one or to indicate tendencies of special schools or nationalities.

Claude Lorraine, whose etchings show a noteworthy degree of finish, produced his masterpiece in the Bouvier ("Cowherd"), rich in atmospheric effect. "Its transparency and gradation have never been surpassed," said Hamerton. Good characterization and a fine sense of composition are dominant features

in the work of Ostade, in whose "The Family," and "Peasant Paying his Reckoning," he accomplishes his result by the simplest means, and has no variety of treatment such as Rembrandt brought to play. He, too, had his pupils and followers, Bega and others. Van Dyck's etchings show his own work only in the early stages, having usually been finished by others. These portraits, "in view of their power of expression and fineness of conception, stand at the summit," says Lippmann, and that despite the fact that Van Dyck never entirely mastered the technique of the art.

These men, as is not unfrequently the case with painters who etch casually, have only a limited number of plates to their credit. Hollar, on the other hand, devoted himself to etching, and was very productive. He was much ground down by the printsellers, working often at pitiful rates, and many of his views and portraits are unimaginative and somewhat perfunctory. Yet his little views are a delight to the eye even through their execution, for he was withal an ingenious and versatile craftsman, and one recalls with pleasure his remarkable studies of muffs and shells. Rembrandt, it will be remembered, did one or two plates of similar subjects. Haden, who himself formed a most noteworthy collection of Hollar's work, says that his "Nave of St. George's Chapel" "is the most amazing piece of 'biting'" that he knows, "as to gradation and finesse."

Another prolific etcher was Jacques Callot, whose series "Miseries of War" is perhaps the best known of his works. He pictured the beggars and the soldiers of his time with much realism despite his mannerisms, and with a remarkable skill in arranging large and complicated groups of figures. Della Bella, somewhat akin to Callot, had a free style.

In the eighteenth century the art of painter-etching declined, and line engraving had its day, in France especially. One finds much etching in the plates engraved for book illustrations, delicate, graceful work by or after Moreau le jeune, Gravelot, Aug. de St. Aubin, etc. In Prussia, Chodowiecki was a painstaking, trustworthy and not too emotional chronicler of the life of his native land. He lacked the finesse and grace of the French, but had an honest bourgeois way of rendering bourgeois surroundings.

Original etching was not entirely dormant, but it was not a period for masters of the art. Boissieu, Dietrich (clever, but imitative), Weirotter and Kobell were among the skillful painter-etchers of the time in France and Germany.

However, the minor etchers also strike their special note of interest. I knew one collector who derived much satisfaction from the possession and contemplation of a portfolio of etchings by Boissieu. In the first place, he appreciated the undoubted ability of that artist; and, in the second place, a more or less complete collection of his etchings was within the possibilities of his pocketbook, which a set of Rembrandt's would not have been. Both good reasons!

During the same period, Italy, where Castiglione, Ribera and Rosa had in the preceding (seventeenth) century won distinction, had Tiepolo (whose painting is exactly reflected in the swing and dash of his work on the copper), Canaletto (Venice views) and G. B.

Piranesi. The last named presented the architectural beauties of Rome in large plates full of grand effects and strong contrasts of light and shade, which should be seen in fine impressions.

Still in the eighteenth century, but reaching into the nineteenth, was the Spaniard Goya, a man of fiery temperament, audacious and revolutionary. His "Caprices" and "Proverbs," with their scathing, brutal satire, and the relentless, horrible presentation of the "Miseries of War," are outpourings of a fantastic imagination or comments of a wildly energetic personality. And it is this powerful, uncanny expression of his nature that makes these plates fascinating, rather than the evidence of remarkable technique that may show through the nervous, daring execution, with its flat tints in aquatint.

Toward the middle of the nineteenth century there came a revival of etching in France. This revival affected both original and reproductive etching, and was furthered by the enterprise of publishers such as Cadart, and of the art-periodicals L'Artiste, Gazette des Beaux-Arts, and L'Art, which, like the Portfolio in England, published many plates, thus popularizing the art and encouraging those who practiced it. As a result, the etching needle was not only wielded by painters who turned to it casually, but by a class of artists who devoted themselves to it almost exclusively. A large proportion of their work was reproductive.

Daubigny, Corot, Jacque, Meissonier, Huet, Veyrassat, and other painters found in etching a congenial method of expression, and some of them handled it



MOTHER AND BABY.

Dry-point by Mary Cassatt.



BORDEAUX, SNOW EFFECT.

Elching by Maxime Lalanne.

A ART MICK TREEP

in the true spirit of the etcher. Millet, in twenty plates or so, made simple, bold, sympathetic use of the medium, producing work that is delightfully characteristic in intent, execution and feeling.

Bracquemond, notwithstanding his other activities. found time to etch nearly eight hundred plates. Many of these are designs for ceramics, occasional pieces. portraits, illustrations and other things that lack the mastery of his best work. Among the latter must be reckoned some of his studies of birds, remarkable in their texture of feathers and their understanding of bird-life: for example, "Le haut d'un Battant de Porte" (four dead birds nailed to a barn door); "Margot la Critique," some pictures of ducks, and "Le vieux Coq," that magnificent old chanticleer, the prototype of his kind, a masterpiece of fowl characterization. A variant of this last subject came from the needle of Bracquemond, on the occasion of the visit of the Russian fleet to Toulon in 1893, in the shape of the Gallic cock, robustly self-assertive, in the full feathers of aggressive maturity, raucously and triumphantly crowing his "Vive le Tsar!"

In plates such as his "Erasmus," after Holbein, he showed a masterly grasp of the necessities of reproductive etching. And one feels a touch of Holbein in the portrait which Bracquemond, at twenty, painted of himself, his left hand holding the bottle of acid, the other etching paraphernalia on the table at his side. An experimenter, using combinations of processes, his most prominent characteristics are robustness, versatility and a resourceful mastery of technique.

Jacquemart has a place apart, as a master of still-

life. He completely controlled the process of etching, and apparently exhausted its resources in giving richness and life to inanimate objects. Choice examples of ceramics. Chinese and Japanese bronzes enamels, exquisite work in glass, rock-crystal, jade, sardonyx and agate, jewelry, elaborate products of the goldsmith's art set with precious stones, he reproduced on copper. He showed a marvelous skill in rendering textures and bringing out the very character of the material. He delighted in placing articles of different material, jade and rock-crystal, for instance, in juxtaposition, to obtain the charm and beauty of reflected lights held by the projections and curves and fairly bathing the objects in luminosity, so that they almost seem endowed with life. As Roger Marx said, speaking of Henri Guérard, he "modified his method according to the object, evoking the very quality of the material, the accidental effects of the surface under the caress of enveloping light."

Many other artists were more or less prominently identified with this revival, and there is a wide variety of styles and subjects to choose from. There is the graceful and facile Lalanne, with a workmanlike sure touch; Appian, Chifflart; Jongkind, whose memoranda of impressions illustrate the extreme of simple linework (and whose style is further accentuated in some blotchy water-color sketches accompanying the collection of his etchings in the New York Public Library); Desboutin, who did many portraits of French literary and artistic celebrites in dry-point; Rochebrune and Brunet-Debaines, who have held for us various architectural beauties of France; Félix Buhot, dashing, re-

sourceful, seeking the aid of aquatint, roulette, and other methods to attain stunning effects. And there are still more recent artists: Helleu, whose dry-points are delightful presentations of feminine elegance and piquancy, Lepère, whose masterpiece, "Amiens Cathedral," shows all his mingled force and delicacy, Béjot, etcher of Paris, Leheutre, Beurdeley, Brouet, Forain and Pissarro, impressionist on copper. And Americans who have worked in Paris, H. A. Webster, D. S. MacLaughlan, and our countrywoman, Mary Cassatt, whose dry-points show a remarkable insight into child nature. The absolute truthfulness of these plain women and ordinary little ones, and the beautiful expression of relationship under this homely exterior, are bound to make their appeal successfully.

Philip Gilbert Hamerton's "Etching and Etchers" is an excellent guide for those who wish a sane survey of the whole field, even if they do not ultimately agree with him in all of his conclusions. Criticism, read in the proper spirit, should whet the insight of the reader.² Another interesting and useful work is S. R. Koehler's "Etching: an Outline of Its Technical Processes and Its History" (1885). There are very many monographs on individual artists, both old and modern, invaluable for reference. In recent years, the practice has arisen of issuing such catalogues of an etcher's plates with photographic reproductions of each print, sometimes even of different states. Rovinski's large work on Rembrandt's etchings is an example of this, as are also Moreau-Nélaton's book on Manet, the

¹ See F. L. Leipnik's "History of French Etching" (1924).
² See also Frederick Wedmore's "Etchings" (1912).

series on Meryon and others which Loys Delteil has brought out, and E. G. Kennedy's Whistler catalogue issued by the Grolier Club of New York.¹

In reproductive work—work, that is, which reproduces in black-and-white the painting or sculpture or other art-production of another artist—the personality evidenced is of course mainly that of the artist whose work is reproduced. The etcher here shows his mastery in his command of the medium and in his sympathetic understanding of the original which he copies, making of his etching not merely a word-for-word translation, so to speak, but an interpretation which may be replete with appreciative suggestion. In method, the reproductive etching, with the considerable degree of finish which it demands, exemplifies still farther the pliability of the art. We are not infrequently told that this lies beyond the pale of etching proper, and the point is made that photography is a better method of reproduction.

"Etching when used for reproduction," says C. J. Holmes, "almost always has to effect its purpose by tones and not by lines, and in sacrificing quality of line it sacrifices (as we see even in the cleverest modern work) its peculiar force and vivacity."

It may be conceded that the original etching offers a purer and higher form of artistic enjoyment. But when all has been said, one may derive much pleasure from contemplation of the best, most serious work in this field of reproductive art. W. Unger, Charles Waltner, Koepping, Théophile Chauvel, Léopold Flameng, Bracquemond, Le Rat; Paul Rajon, from whose hand we have portraits of Tennyson, Mrs.

¹H. N. Harrington's "The Engraved Work of Sir Francis Seymour Haden" (1910) is another one of this class of illustrated catalogues increasing in number.

Grover Cleveland and the beautiful one of Susanna Rose, are among those who have proven themselves sympathetic translators of paintings into black and white.

A particularly fine collection of nineteenth-century French etchings may be seen in the Print Room of the New York Public Library,—a remarkable collection indeed, for the donor whose name it bears, the late Samuel P. Avery, possessed the collector's instinct in a highly developed form; so much so that, in various individual cases, a much more complete showing of the artist's works may be studied here than in Paris. He also knew where to avoid unnecessary completeness, for there are many artists of whose work even a large collection need not necessarily have more than a few examples to illustrate their style.

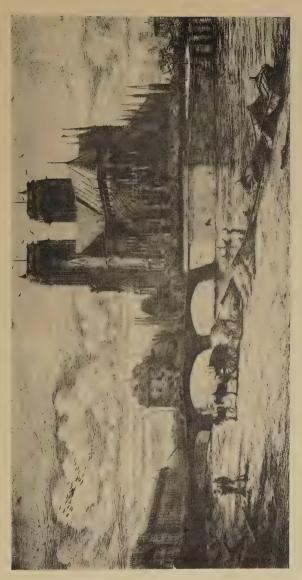
Pleasure may be derived from lesser work also, but in our present survey we can best illustrate the principles that form the basis of appreciation by reference to the most significant expression of the same. And that we find, naturally, in the work of the greater men, those who by their originality, impressive personality and mastery of technique have left their indelible mark on the record of achievement in etching.

Such was Meryon, that strange, erratic genius, who in a series of beautiful plates gave voice to the poetry of the Paris that has been since demolished. His work is a weird, powerful embodiment of the spirit of old Paris. "M. Meryon," said Burty, "preserves the characteristic detail of the architecture. . . . Without modifying the aspect of the monument, he causes it to express its hidden meaning, and gives it a broader

significance by associating it with his own thought. Hence the twofold power of his work." A life of discouragement and disappointment ended in a lunatic's grave. Poor Meryon has "arrived,"—posthumously; his fame is assured, now that he is no longer with us. In a moment of despair he destroyed some of his finest plates; to-day, high prices are paid for impressions of the "Abside de Notre Dame," for which he was glad to get a franc-and-a-half!

It was in Paris that Whistler etched some of his earliest work, and some of his best. Later, in "Passages from Modern English Poets" (1862), one of the volumes issued by the Junior Etching Club in London, there appeared an etching by him, "The Angler." It was not very characteristic, not calculated to set the Thames on fire. But even if it had been, it may be questioned whether the fact would have been realized then. For the world was hardly ready for Whistler when he first burst upon its vision. Recognition came in time and came fully, and it was won by sheer originality.

Whistler was practically himself from the first. There was development, of course. But his emancipation was quickly complete, and his point of view always intensely personal and alert. As Wedmore aptly stated in 1896: "Now, Whistler's newest work—his work of this morning, be it etching or lithograph—possesses the interest of freshness, of vivacity, of a new and beautiful impression of the world, conveyed in individual ways, just as much as did his early work of nearly forty years ago." There was no waning of power; Whistler did not outlive his



L'ABSIDE DE NOTRE DAME DE PARIS. Etching by Charles Méryon.

This is the second state (according to Burty's catalogue of Méryon's etchings), with the publication line: C. Méryon del sculp maccolie. Imp. Rue Neuve St. Etienne du Mont 26.

in the same of the same



SHERE MILL POND.

Etching by Sir Seymour Haden, P.R.E.
First state.

reputation, did not fall into the not uncommon self-sufficiency which advancing years may bring, with its repetitions of points made in former years. But concurrence in this view does not prevent more than one from showing decided preference for the earlier work of Whistler, the Thames and French sets, and the "Twelve" and "Twenty-six" Etchings of Venice, or from eliminating some of the later plates as all too slight in achievement, too sketchily indicative to merit the high praise accorded to his best work.

However, these considerations do not affect his standing as an etcher, and are, after all, a matter of taste. His work is the very embodiment of modern etching.

In his attitude and his expression of intent and opinion, Whistler was original from the beginning, from the time when, instead of completing a chart intended for the United States Coast Survey, he engraved on it sundry heads and other sketches for his own delectation. When the plate was confiscated, and he was told that an unwarrantable thing had been done, he agreed, said it was certainly unwarranted to remove a plate from the author's hands "before he had completed his pleasure upon it."

He was a law unto himself. The sureness of vision, dexterity of hand and sense of adjustment with which he used the proper means to produce his effects are his chief characteristics. His art is pre-eminently one of selection. What he leaves out is almost as important as what he puts in. He shows as much art in avoiding certain details as in including others. His art is therefore one of suggestion.

"In art," he wrote, "it is criminal to go beyond the means used in its exercise." To exquisite execution he added remarkable arrangement of line. He had an unfailing judgment, an unerring eye for the proper placing of the lines of a design. Even his famous "butterfly" monograph was not put into one of the lower corners, as signatures usually are, but was set down in a different place each time, wherever in his opinion it was needed to make its emphasis as part of the whole design. One feels that here, as elsewhere perhaps, his artistic instinct and his personal pose coincided.

His many views of Venice well illustrate his attitude, the predominance of the artistic interest expressed with an intensely personal note. He saw Venice for himself and so recorded it, neither historically nor architecturally, not from the standpoint of the guide-book nor of the historian of art, but as a personal impression. To him the shadowed archway, the picturesque bit of canal, the ornamental detail of architectural effect were as interesting as the Basilica di San Marco or the Doge's Palace. He needed no processions of state, no magnificent paraphernalia of civil or ecclesiastical pomp to lend distinction to his etchings. The story-telling interest is entirely absent.

A respectable number of books and a very large number of magazine articles devoted to this most able artist and clever and eccentric man have been published. Mortimer Menpes has written personal reminiscences of Whistler. So have the Pennells and Otto H. Bacher. Reflective analysis of his etchings may be pursued under the guidance of Théodore Duret, or Elisabeth Luther Cary, who have both written well-illustrated volumes on his art.¹

If we claim Whistler, though expatriated, by virtue of his American birth. England, where he lived for many years, has her own native-born Haden, whose name is one of the most noted in the annals of etching. An amateur, if you wish—for his profession was surgery—Sir Seymour Haden, the honored president of the Royal Society of Painter-Etchers, produced a considerable number of plates which combine breadth and vigor with an "artistic sympathy with pure and ordinary nature," as one critic puts it. Plates such as the "Windmill Hill," "Nine Barrow Down," "Wareham Bridge," "Little Boathouse," "Egham Lock" (with its fine rendering of still water), "Mytton Hall," "River in Ireland," "Lancashire River" and the famous "Shere Mill Pond" have placed him in the first rank of landscape etchers of all times. The lastnamed etching, in the opinion of one critic, is, "with the single exception of one plate by Claude, the finest etching of a landscape subject that has ever been executed in the world."

Entirely different in style and subject is the work of Alphonse Legros, a Frenchman who has lived in London for many years. In portraits such as those of G. F. Watts and Manning, and plates of a powerful seriousness and human sympathy such as the "Death of the Old Vagabond" or the series "Bonhomme Misère," or in silvery brookside effects of early spring morning, he has shown seriousness and dig-

^{*}Excellent catalogues of Whistler's etched work have been prepared by Moward Mansfield for the Caxton Club, Chicago (1909), and by E. G. Ecnaedy for the Grolier Club.

nity, refinement and strength, and yet an absolute

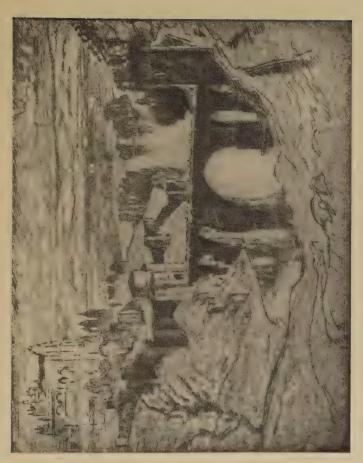
originality.

There are points of affinity between Legros and his pupils William Strang and Charles Holroyd, also men of strongly pronounced and stern style. Again I am tempted to cite names, but I shall limit myself to a few: Menpes, C. J. Watson, Slocombe, Colonel Goff. Herkomer and Joseph Pennell, originally of Philadelphia, that remarkably prolific and masterly delineator of city scenes. His is an art of resourceful variety, of simplicity of treatment, of directness of manner and of what has been well called a "wise reticence in line." There is Frank Brangwyn, too, with his large, decorative plates. And D. Y. Cameron, "a passionate connoisseur of the picturesque," whose "richness of tone in the treatment of architecture," says Hind, "is the achievement of great power and individuality." The strong yet unobtrusive individual note of Muirhead Bone is expressed largely in drypoint. James McBey should also be noted.1

There is much young blood here, modern in view-point and style. A contrast to the earlier days, when Samuel Palmer expressed the quiet moods of English landscape in sympathetic and well-finished plates, but not so very different, in spirit, from the twenty or thirty etchings produced by that excellent draughtsman Charles Keene, of *Punch*.

This suggestion of comic art, by the way, recalls the fact that etching was at one time used for book illustration, particularly in England, and again particularly by Leech, George Cruikshank, Phiz and other artists. Of Cruikshank, Hamerton wrote:

¹ For the newer men, see the annual "Fine Prints of the Year."



ST. MARTIN'S BRIDGE, SPAIN.

Etching by Joseph Pennell.

(Courtesy of F. Keppel & Co.)



WILLIAMSBURG (Brooklyn).

Etching by Charles A. Platt.
(Courtesy of F. Keppel & Co.)

"Only those who know the difficulties of etching can appreciate the power that lies behind his unpretending skill; there is never, in his most admirable plates, the trace of a vain effort."

Pennell, like Whistler, connects with our own land. Among American etchers the influence of Whistler is strongly evident, even in the case of those who later on emancipated themselves almost entirely. Frank Duveneck and Otto H. Bacher, who were with Whistler in Venice, come readily to mind here. They are two noteworthy figures among the older men. The list of American painter-etchers of decided ability is a long one. Praise may safely be applied in the comparative spirit, and not on patriotic grounds only, for the best of them may confidently measure their steel with those of other lands. Stephen Parrish, Charles A. Platt, with sure method of expression, delicate suggestiveness and judicious economy of line: Mrs. Mary Nimmo Moran, emphatic and bold; Thomas Moran, Peter Moran, C. A. Vanderhoof, W. L. Lathrop, Kruseman van Elten, Samuel Colman, J. C. Nicoll, I. H. Hill, I. A. S. Monks, C. H. Miller, whose method is sketchy, and many others responded with a distinguished understanding of principles, and control in practice, to the impulse for painter-etching which for a comparatively short time was strongly felt in this country, and which found expression in the organization of the New York Etching Club in 1877. On the latter occasion, three men united to produce a little plate (the original copper of which still exists) for the instruction of their fellow-artists— I. D. Smillie, a veteran profoundly versed in the technique of the art; Dr. Leroy M. Yale, a physician, the best of whose serious work had the qualities demanded of painter-etching, including a proper sense of both the possibilities and limitations of the etching needle; and R. Swain Gifford, the landscape painter.

Various painters, like the last named, sought expression, with more or less success, in etching, some with very decided originality. Robert Blum produced some twenty plates of characteristic force and snap, and J. Alden Weir evidenced his experimental and investigating trend in a series of interesting impressions of landscape.

The story of this movement is well told in Ripley Hitchcock's little book on "Etching in America," and in the larger volume by the late S. R. Koehler, who in his short-lived but well-edited *American Art Review* (1880-82) worked so faithfully and well for the furtherance of this fascinating art in the United States.

For some time one heard little here of original etching, crowded out, as it appeared, by the reproductive branch of the art. Recently, however, a "Chicago Society of Etchers," a "Brooklyn Society of Etchers" and a "California Society of Etchers" have been formed, young men are taking up the art with enthusiasm, and Smillie, Mielatz, Senseney, White, Pennell, Lewis, and others have in recent years been teaching the technical process at the League and the Academy in New York City.

If I mention E. L. Warner, C. Washburn, Webster, J. Sloan, O. J. Schneider, White, H. H. Osgood, L. G. Hornby, Hassam, Benson, Roth, Woodbury, it is with no desire to make selection or institute



WATER STREET, PHILADELPHIA,

Etching by Charles Henry White.
(Courtesy of Harper Bros.)



ELF AND BEAR.

Etching by Max Klinger.

One of his series "Intermezzi."

The flat tints are laid in with aquatint, and there is rouletting on the flowers.

comparisons, but solely to indicate that these and other Americans are proving the possibilities of etching. One need not always roam in foreign fields to find art worth appreciating.

This movement in favor of original etching is felt in all civilized countries, it appears. In Germany, Neureuther, Gauermann, Morgenstern and others in the earlier years of the nineteenth century had etched plates, at times with something of a literary flavor, and with an infusion, perhaps, of the longing for national expression. Somewhat later, Menzel, who used every medium that he tried with quick comprehension of its technical resources, showed in his etchings the same insight into the nature of the medium, the same practical skill in its manipulation. But they illustrate mainly an adaptation of known expedients to his style.

It is young Germany which is giving potent expression to its aspirations in etching as in other forms of art. A considerable number of German artists are to-day giving utterance to modern ideals through the agency of the etching needle, some occasionally, others habitually. Men such as Orlik or Emil Nolde seize upon various processes, lithography, etching, wood engraving, in turn, to find an outlet for their extremely personal view of things. In these days of revolts, "secessions" and splitting up into special small groups, this productiveness will naturally not be free from aberrations and vagaries. The anxious desire to avoid the commonplace and conventional will always cause some to shoot far beyond the mark. But the residue makes for advance. There come to mind

A summary record of American etching will be found in the present writer's "American Graphic Art" (1924).

the weird fancies of Jettmar, the delightful conceits of Heinrich Vogeler, the archaic effects of Hans Thoma, the delicate lines of the thoughtful Max Klinger, the highly finished large plates by Geyger, who, like Klinger, has turned to sculpture. F. Schmutzer, Oskar Graf, Walter Leistikow, Max Liebermann, Hermann Struck are others who have attacked the copper with originality and individuality.

It is a noteworthy fact that the work of the best quality among Germany's younger men is sane. Despite the extreme diversity of style and purpose which a collection of these etchings discloses, the means used are generally "legitimate," the forced note is seldom struck. Occasionally, it is true, we find experiments of questionable result, such as the blotchy skies affected by Overbeck. But, as a rule, nothing more startling occurs than Klinger's use of aquatint, or the plates executed entirely with the roulette by H. Wolff, who thus instances a new possibility for an instrument generally used as an adjunct, and with more or less mechanical effect.¹ A feature of peculiar interest is the increase of women etchers to be taken seriously, intensely seriously in the case of Frau Kollwitz, who presents gloomily dramatic scenes from the life of the poor and the downtrodden, and sounds an echo to the note of the dramatist Gerhardt Hauptmann in her "Weavers."

A number of the artists are grouped about certain centers, such as Worpswede and Karlsruhe, and there are several regular societies of etchers, some of which issue portfolios of their members' work.2

In Holland, C. Storm van 's Gravesande, with a ¹ More recently, Wolff attempts almost too much, as when he copies the effect of a rapid color sketch.

² In late years, expressionism has added its, to some disconcerting, note in Germany's graphic art.

noteworthy power of suggesting water by a few well-chosen strokes; M. Bauer, the prolific Ph. Zilcken, Carel L. Dake and Witsen, an etcher of many resources and peculiar methods, are among those who have perpetuated traditional honors in modern ways.

Among Scandinavian artists was Zorn, an etcher of great facility and strong temperament, unrivaled in his rendering of the nude. A. H. Haig was noted for his smooth skill in architectural subjects. E. Munch forms a striking contrast, representing "occurrences of the inner life," foreshadowing expressionism.

Evert van Muyden, of Swiss origin, is best known by his etchings of animals. And there is a large portrait of Franz Liszt, by the Hungarian Rippl-Rónai, who has lately turned to lithography.

The field is large, very large, and to-day there is, particularly in France and Germany, a striving for original expression in color. There were experimenters who prepared the way. Eugène Delâtre, a master of color printing, familiar with all details of its resources, Henri Guérard, Bracquemond, Raffaëlli and Lepère were among the earlier ones to take up color etching. In recent years, at the annual Salons of "original engravings in colors" in Paris, as also elsewhere, there has been shown work by Thaulow, Charles Houdard, Grimelund, Balestieri, Allan Osterlind, who, like G. de Latenay and various others, uses aquatint: Robbe, Chabanian, Pichon, Delpy, Edgar Chahine, Jacques Villon, H. Jourdain, Baertsoen. Cottet. Béjot. Laffitte, Ranft, whose "light colors" and "pulsating tints" are extolled by Mourey, Truchet, Steinlen, Bernard Boutet de Monvel, who

uses low, flat tones, and Charles Maurin, whose studies of the nude are "delicately tinted with soft grays and pale pinks." The simpler effects, on the whole, seem most pleasing; some of these men lay on the colors in careful modeling until, as Henri Frantz says, "the engraving almost disappears under the accumulation of colors."

The whole trend of the graphic arts in Germany would naturally lead artists there also to the application of color. Unger and others have employed it with more or less completeness of effect. Some have used but a few broad tints, so L. Michalik in his nicely modulated snow scene by moonlight. Others, again, employ one color only, as witness the bluish tint in Oskar Graf's "Dachau by Moonlight" (with aquatint) or a tinted paper, like the blue paper on which Suppantschitsch's "Sacred Grove" is printed. The color in Klinger's "Penelope" rather accentuates the sternness, the want of superficial grace in his work, and somehow or other does not "sit" well, is not convincing.

Of Americans in Paris, Mary Cassatt has done a number of studies of women with flat tints of color, Japanese in feeling and arrangement. In the United States, George Senseney utilizes a combination of soft ground etching and aquatint to give color effects of more completeness in gradations.

Etching in colors is a somewhat comprehensive term. There are various ways of arriving at results. An aquatint or other light grain may be provided to hold the color-ink (as in the work of Cassatt, Michalik, Graf), or paint may be applied directly to the

¹ For technique, see Hugh Paton's "Color Etching" (1909).

copper. In either case it is not the etched line only which holds the color. The printing may be done from several plates, one for each color (as by Guérard, some of whose progressive proofs may be studied in New York; Jeanniot or Houdard), or from one plate (as by Ranft and Cassatt), the inking in the latter case being done à la poupée, which poupée or "doll" is a bunch of rags. The color may appear in a few touches, as when Raffaëlli used simple "notes" of color, or in large flat surfaces, or even with some gradation and completeness of effect.

As to the propriety of color work, opinions will differ. Many will undoubtedly prefer the simple dignity of black and white. None of the great masters of the art, indeed, have called in the aid of color. But much of the color-work of these modern followers of Ploos van Amstel, and others of older days, is exceedingly clever, although the desire for novelty in these days produces queer outgrowths. The fascination of an art such as this may beget injudicious and inartistic use of it. Experiments in color-printing have always proved interesting, at least.

At all events, it would seem that here, too, the rule would hold good that applies to etching per se, namely, that of summary of impression rather than full rendition. The color etching should not vie with the chromo, nor with the three-color reproduction of a painting, nor with the colored picture postal. This is felt in many of these modern color-plates, which are characterized, on the whole, by an avoidance of finished gradations, echoing the summary of the etched line. So in the work of T. F. Simon, for instance.

More details concerning contemporary etching are given in Charles Holme's "Modern Etching and Engraving" (1902), a well-illustrated, concise review. The large volume on etching in the series of four volumes on contemporary graphic arts, issued by the Gesellschaft für vervielfältigende Kunst of Vienna, covers the nineteenth century, and is richly illustrated. The periodical Graphische Künste, published by the same society, is an indispensable record of international scope. French and German etchings by artists of the day were formerly published regularly in the Revue de l'Art and the Zeitschrift für bildende Kunst. In England there is the Print Collector's Quarterly, in the United States the Print Connoisseur. And there's Art in Australia (quarterly).

These are all indications. For to attempt to do more than point out general principles, as exemplified in a few prominent cases, is folly. You cannot compress a voluminous literature into one volume, otherwise bibliographies and indexes to periodicals would not be necessary. But enough has been said to show how very wide the field of etching is, how many varieties and specialities of taste it can satisfy. With the strongest men, the most noted names, the expression of individuality is so pronounced, so distinctive, that the suppleness of the medium is illustrated in the most forceful manner. And the summariness of method, the succinctness of statement so characteristic of many of the best etchings, serves to emphasize all the more strongly this suppleness, this wide possibility of variety inherent in the etching needle and the copper plate. It is the old story of

¹ See also C. Holme's "Modern Etchings, Mezzotints, and Dry-points" (1913), M. C. Salaman's "The Great Painter-Etchers" (1914) and other "Studio" publications. And the annuals "Fine Prints of the Year" (London) and "Fifty Prints" (New York).

style. Not mannerism, but style, the natural, inevitable expression of personality.

It is the privilege of all of us to become acquainted with any or all of this work, old and new. This will be accomplished by seeing as much of it as possible, but not too much at a time, for the wearied eve and brain will not respond. The student also should follow up the art news in the daily papers, reading the criticisms in those which give serious attention to art, as well as in the art magazines. He should visit all exhibitions possible: they will be found mostly in art dealers' galleries and in private studios. If the student lives in a large city, where a print-room is established similar to those in London, Paris, Berlin, Dresden, Amsterdam or other European cities, all the better. Washington, Boston, New York, Philadelphia, Chicago, Cleveland, Indianapolis, Buffalo, Baltimore have public collections, with exhibitions, and with print-rooms in which portfolios can be examined. In a city like New York there is no elevating pleasure to be had as cheaply as the enjoyment of good art. With few exceptions, art exhibitions are absolutely free.

The effort to see as much as possible, understandingly, may in time lead to fuller reading on the subject as a whole, or on some particular part of it. For, while keeping mind and eye open and receptive for beauty in any form, one will naturally, in time, come to a selection of preferences, of a nationality, or school, or individuality which particularly appeals to one's nature. And if the print-lover drifts into by-paths, if he leaves the beaten track in developing

the scent of the collector, and finds out for himself some delightful and little known old etcher, or lights on beauties in work not yet fully appreciated, perhaps some German or American work of to-day, the keen joy of discovery, the pleasure of the "find," is his.

CHAPTER III

LINE ENGRAVING

To a great many persons, line engraving is synonymous with steel engraving. Or rather, they know line engravings only as steel engravings. Hence the letters that reach those in charge of print-rooms, asking the value of "a fine, old steel engraving nearly one hundred and fifty years old." If such a thing existed it would be unique and valuable indeed, for steel plates were first used in engraving about 1820, while previous to that time the engravings were executed on copper. And later, too, sometimes the work was done on a copper plate which was then steel-faced for printing. Even when the engraver works directly on the steel it may be softened so that the tools attack it more easily. It then can be hardened for printing.

The reason for the misapplication of the term "steel engraving" is no doubt to be sought in the vogue which this form of art enjoyed during a period extending, roughly, from 1830 to 1870. For many years the steel engraving seems to have held preeminence in public estimation as a sort of supreme expression of art for the home. It was disseminated in various ways, even as premiums for art and other magazines. In very many homes to-day you will still find some large steel engraving (say, of Land-

seer's "Shepherd's Chief Mourner" or "Dignity and Impudence," West's "Battle of La Hogue," Wilkie's "Guess My Name" or "The Pedlar") as the chief ornament on the parlor wall. These engravings are usually executed with a considerable degree of technical ability, and show a cleanness of line, a precision of statement and an attention to detail which, combined, appeal strongly to the average beholder. Hence, no doubt, their popularity.

Line engraving is, as its very name implies, essentially an art of the line. Whatever it depicts, shadow, tone and texture, must be rendered in line. And the line is always a call on our imagination to accept a symbol. A symbol to which, indeed, we have become so accustomed that the schoolboy unhesitatingly accepts and understands the outline drawing on the blackboard, although there are no outlines in nature. The line is a generally accepted compromise, a short cut, so to speak, which in the slightest sketch may speak volumes. In the line engraving it must render tones and yet retain its own individuality.

The principal tool in line engraving is the burin or graver, a four-sided piece of steel, square or rhomboidal in section, and cut off obliquely at one end, producing a sharp point. The other end of this little bar of steel is fastened in a wooden handle. While engraving, this handle rests against the palm of the hand, with the fingers on the steel bar, and the graver is pushed forward over and into the metal. As the steel plows along, cutting a furrow in the plate, it throws up a ridge of metal on the side; this is removed with the scraper, a steel instrument resembling a

dagger in shape. The places scraped are then smoothed by going over them with the burnisher, similar in shape to the scraper, but blunt and highly polished, looking something like a narrow, pointed metal paperknife.

The very nature of this process produces an inevitable formality in line engraving. It cannot have the freedom of etching or dry-point, although those two processes have not infrequently been called in to add their qualities to those peculiar to line engraving.

It is this precision of statement, this beauty of line, which forms the distinctive quality of line engraving, and makes it what it is, and nothing else. It is restricted by the manner of its execution, and its characteristics are so obvious that there is no very great temptation to twist it into manners of expression for which it is unsuited. And yet its practice has offered such widely varying possibilities of style as are shown in the classic severity of Mantegna, the simple dignity of Marc Antonio, the conscientious finish of Dürer, the brilliant effects of the French portraitists of the seventeenth century, the cold carefulness of Wille of the eighteenth, the tones which Gaillard in the nineteenth produced with short, microscopically fine lines placed close together.

In the earlier days of the art, it was often a means of original expression. Mantegna, Dürer, the Behams, engraved their conceptions directly on the copper. Later, also, we find Nanteuil engraving after his own designs. But, on the whole, engraving on copper soon found its field in reproduction, for which it is on the whole best suited.

In modern days it has seldom been used as an autographic art, although the burin has been employed by some French etchers to strengthen certain lines on their plates, just as the line engravers have made a frequent practice of etching the principal lines and a basis of tones of their engraving before deepening them with the burin, as well as of adding a certain freedom of effect by purely etched lines. Original line engraving is a rarity now, seen in isolated cases, such as that of the experimentally interesting "Arcturus" by J. Alden Weir, or in the book-plates engraved by the designers themselves, C. W. Sherborn, E. D. French and others. Karl Stauffer-Bern used the graver in original work, cutting shallow lines, with little pressure, so that he could guide the tool with some of the freedom of the etching needle, varying the direction of his lines instead of arranging them on the set principles of line engraving. Herkomer pronounces his own portrait of Wagner a tour de force with the burin. And there is J. E. Laboureur.1

In contradistinction to wood engraving, which is a relief process, line engraving is an intaglio process. That is, a process of "cutting in," the lines all being cut into the copper and thus lying below the surface of the same, instead of forming ridges on the top after the surrounding material has been cut away, as in wood engraving. The process of printing, therefore, differs also. When the wood block is rolled up with ink, the latter is caught by the projecting lines which, in the press, leave their impress on the paper. But here, the ink is spread over the engraved copper-plate, and then wiped off again, so that only

¹ Laboureur has used the burin, for separate prints and for book illustrations, in an absolutely modern spirit; a matter of true "painter-engraving."

the ink remains which has lodged in the incised lines.

To print from an intaglio plate, therefore, means to subject it to such pressure that the paper will be so forced onto—even into—the lines that it absorbs the ink.

The manner of holding the graver inevitably produces formal lines. And these lines in time came to be applied in a complicated system. Lines crossing each other at varying angles, lines in varying curves. broken curves, lines broken or dotted, short lines not parallel, heavy lines and fine ones. It was a natural tendency to drop into the use of lines of a certain thickness, or angle, or curve, or length, to represent certain textures. The use, for example, of transverse, very short lines to represent flesh, or of broken, wavy lines to represent foreground sod, or of lines cut by the ruling machine to indicate sky. Rough garments and smooth ones, the bare skin, the fur of animals, the feathers of birds, water, foliage, flowers, grass, the many objects widely differing in texture with which the engraver has to deal, are represented by means such as those indicated. It is the individual power of the engraver which uses the latter either with the conventional application of certain formulæ, or with the utmost freedom of expression of which the not easily yielding medium is capable.

In the works of the greatest masters of the art technical details are lost sight of, more or less, in the virtuosity with which the graver is handled to produce the desired effect. Technique with them has not become the all in all, nor is it used in absolute devotion to a fashion set by some predecessor.

The dissimilarity in the productions of different men in different countries at different epochs is not only one of the expression of nationality or of the prevalent artistic feeling of a period (which is shown notably in the artist's attitude toward his subject, and his choice and treatment of the same), but it is also one of style, of that style which is the result of the peculiar employment of the medium in each case.

In the works of the earlier men there are certain characteristics in handling quite different from the decided but not infrequently mannered dexterity which marks the engraving of later times. Comparison of an engraving by Mantegna (1431-1506), with its straight, parallel lines, without the niceties of modern workmanship, with the elaborate finish of the vignette on a piece of paper money, will show what is meant. In the one case, an artist of classic feeling, of large ideas, with something to say, saying it in vigorous terms, impatient almost, one might think, of the material offering difficulties to his hands, but saying it in unmistakably fine language, nevertheless; on the other hand, the work of a man who knows his craft, who lays his lines and draws his curves with precision and skill, producing a picture that fills its part, and as an engraving is neither an offense to the eye nor a stimulus to the imagination.

While this difference between the oldest engraving and the newest is thus sometimes wholly or partly a matter of individual treatment, it may also often indicate simply the early struggles to conquer a not

yet familiar medium. This evidence of testing, of feeling one's way, is felt in some of the Italian engravings of the late fifteenth century or the plates of some of the old German masters, perhaps even in the Englishmen of a later date—Rogers, for example, And vet, with increasing technical ability, there came diminution of the big quality and of spontaneity, an insistence on the display of manual skill. Line engraving is a noteworthy illustration of the fact that in the development of a graphic art the subjugation of the medium, as it progresses, opens the way for lesser talents, in whose hands technique eventually becomes more or less an end instead of a means. Mannerism and conventionality result, which are the effect of craftsmanship exercised mechanically, without reference to thought or feeling. The favorite form in which this mannerism finds expression is inevitably meaningless neatness and finish.

After the craftsmanship of the art was developed and had attained its most brilliant results at the hands of the Italian, German and French masters of the sixteenth to eighteenth centuries, it became gradually more formal and conventional until it was in many cases simply an exercise of skill, often of a high order, but not infrequently cold and hard as the metal on which it was carried out, or weak and flabby in its attempts at softness and delicacy, without the fire of original incentive, of genius.

Line engraving underwent a technical development from the simplest treatment to the most varied and involved of which the graver is capable.

It is an interesting experience to go through a col-

lection of representative engravings of the various schools, illustrating the changing phases of the art in its development. They can be seen with slight trouble in some of the large cities. Good public collections are to be found in the Boston Museum of Fine Arts, the Library of Congress, Harvard University, the Metropolitan Museum (New York) and the New York Public Library. Exhibitions are arranged by these print-rooms and by dealers, which offer either a comprehensive summary review of the art, or a completer view of one of its phases: say, early German work, or portraits by French artists, or titles and frontispieces by Englishmen, or the work of some individual artist, Dürer perhaps. Where the originals are not to be seen, one may be fortunate enough to find the publications of the International Chalcographical Society, or the folio volumes "Engravings and Wood Cuts by Old Masters" (sec. XV.-XIX.), edited by Friedrich Lippmann, in which the engravings have been so finely reproduced that "facsimile reproduction" has been stamped on the back of each sheet so that improper use may not be made of it. There are also the less excellent reproductions -good as memoranda, however-of the "Kupferstichkabinet," published by Fischer & Franke in 1807 and after, or Ottley's "Facsimiles of Scarce and Curious Prints," as well as various reproductions of works of individual artists, such as those by Amand Durand after Lucas van Leyden, etc.

Exceedingly cheap material is sometimes to be had. I recently saw advertised a volume of German origin, with English text, containing reproductions of all

of Dürer's works—over four hundred illustrations in all—at the price of three dollars. However, such cheap reproductions are generally to be used for reference only. For they are usually produced by the half-tone process, which is based on the use of a "screen," the network of lines in which cuts up the lines in the engravings reproduced and destroys much of the effect. This disadvantage does not appear in the Lippmann, Amand Durand and similar reproductions, which are in absolute facsimile.

A study of this material leads to the history of the art. And if we now take a rapid survey of the field, noting the main tendencies and most noteworthy examples of individual expression, we must not forget that there is a voluminous literature on this subject. That may be turned to for information on some specialty, some particular period, or nationality, or artist. Duplessis or Lippmann on the Italian engravers before Marc Antonio will be looked up, or S. R. Koehler on Dürer, F. R. Halsey on Morghen and so on. For a compressed history of the whole field, Lippmann's "Engraving and Etching" is perhaps the best. W. O. Chapin's "Masters and Masterpieces of Engraving," a larger book, is written with evident interest and devotion to the subject. works of reference include also some exceedingly useful ones, not of a kind to be read through, but to be consulted as occasion demands. These are the dictionaries and catalogues of engravers and their works. There are Adam Bartsch's monumental "Peintre-graveur," and the compilations of Nagler, Dutuit and Leblanc, dealing with the general subject. And

¹ Since the above was written, A. M. Hind's excellent "Short History of Engraving and Etching" (1923) and Paul Kristeller's "Kupferstich und Holzschnitt in vier Jahrhunderten" (1921) have appeared.

there are those covering special nationalities or periods—Robert Dumesnil for France, Andresen for Germany, Portalis and Beraldi for the eighteenth century and Beraldi for the nineteenth, all of them books the collection of which is usually left to the art departments or print-rooms of public libraries.

The question of the origin of engraving on metal may be put aside as leading to discussions which would stand in our way.

It will suffice, then, to say that the use of engraved plates for reproduction of designs by taking impressions has been traced by various historians to the practice of goldsmiths who rubbed color into the lines of engraved ornaments, and pressed paper upon them in order to preserve a pattern of the design. The lines in these metal ornaments were often intended to receive a black enamel in order to make them stand out more clearly. Impressions taken from these metal plates before the black substance had been run in have survived to our days. They are known as nielli. Maso da Finiguerra was a noted niellist.

And now, after this little tribute to the spirit of historical inquiry, we can turn to the business in hand, and that is to look at things.

And the first look may cause astonishment, perhaps some dismay. This very earliest German work, of the middle of the fifteenth century, at first sight appears puerile in the pitiful helplessness of its makers, fettered alike by limited draughtsmanship and the want of acquaintance with this new medium, copper. But despite the elementary technique, and the woodenlooking figures, there is rough strength, and an ear-

¹ See A. M. Hind's "Short History of Engraving and Etching" (1910), pp. 36, 39, 40.

nestness sometimes grotesque, in the work of these early men, nameless, known to us only by designations borrowed from some mark or initial or date on their engravings, the "Master of 1464," "Master of the Playing Cards," "Master of the Gardens of Love," "Master E. S. of 1466."

Now when encomiums are lavished on such work in all too flowery terms in some handbooks, the author is no doubt regarding it from the viewpoint of the enthusiastic historian. The praise is simply to be taken in a relative sense. The work is good,—for its time.

It has sometimes seemed to me that the very enthusiasm of some critics may frighten off people who perhaps think their case is hopeless because they cannot see what they are asked to in the work of these old engravers. Such a writer, considering some individual artist, may temporarily wear blinkers that shut out the view of everything else, so that the artist looms up in proportions which would be considerably reduced on comparison with others. And the writer, seeing him thus, indulges in superlative phrases that leave us little to say when we get to the really great men. We are then in the position of the effusive young lady who, en route to Niagara, expended her expectant enthusiasm over every tree and hummock and brook, which she pronounced "grand," "magnificent," "gorgeous," to find, when the grandeur of Niagara finally burst upon her vision, her vocabulary exhausted; she could only gasp "how cute!"

Seriously, this little anecdote illustrates another point. Beside the magnificence of Niagara there is

the more intimate beauty of sunny meadows, of shady nooks, of mysterious forest recesses, all with a charm quite their own. So, too, beside the great masters we have those of lesser talent, who also have their claim on our interest, and in whose works we can delight if we only take them as they are and do not expect them to show qualities which they cannot have.

But I must collect the scattered sheep of thought and return to our early German engravings. In them, by the very struggle with the medium, the individuality is brought out. The hand still gropes, the copper is not yet tractable, the burin does not yet move with the certainty which it is later to attain. But there is the vigor of the pioneer. There is an outlook on life so simple and sincere that it is bound to lay hold of us, and we smile in sympathy with the effort rather than in supercilious toleration of the weakness in design and execution.

In the "Master E. S. of 1466" there is already more definite expression of the striving for completeness of effect, for cleanness of line, although the often short, scratchy lines are little like those of the style eventually to be developed. Israel van Meckenen, I. A. of Zwolle, Mathæus Zasinger, Albert Glockenton about the same time or a little later were attacking this problem in Germany and the Low Countries. More strongly shown, in improved technique, does this Teutonic spirit of exactness, of conscientious care and of thought and sentiment withal, appear in the plates of Martin Schongauer, which mark a considerable amount of technical process. He shaded with curved lines.



CHRIST APPEARING TO MARY MAGDALENE.

Line engraving by Martin Schongauer.
(15th century.)

Interest, in this serene composition, is centred on the two figures, the landscape barely indicated. Delicacy in execution and spiritual fervor combine to make this a remarkable plate.



ST. JEROME IN HIS STUDY.

 $\begin{tabular}{lll} By & Albrecht & D\"{u}rer. \\ There is a remarkable charm in the treatment of this sunlit interior, with its suggestive details. \\ \end{tabular}$

The general progress of development in line and wood engraving is:

First, Outline.

Second, Shading with Straight Parallel Lines.

Third, Curved Parallel Lines.

Fourth, Cross-hatching.

In Hamerton's "Drawing and Engraving" an ornamental design by Lucas van Leyden is reproduced as embodying these four elements.

So these old fellows found themselves, found even a certain freedom and lightness of line, as in the case of the "Master of the Amsterdam Cabinet," whose engravings are treated much like etchings.

But it is in Dürer (1471-1528) that the characteristics indicated were most fully developed, and found supreme artistic expression. He passed beyond the efforts of all his predecessors, in his application and mastery of new technical effects. It is noticeable that while he employed cross-hatching, he did largely without it, using long lines following the form of the object he depicted, as in the cushions in the "St. Jerome in His Cell," or the fruit in the hand of the "Virgin with the Pear." He accomplished tender gradations of light and shade not attempted before. He reproduced textures with remarkable effectiveness and a degree of realism which stands out strongly in the gleaming helmet in his "Coat-of-Arms with the Skull." He portrayed his friends with strong characterization, and with attention to detail to the extent of showing in the eyes of Frederick III., the Wise, Elector of Saxony, the reflection of the window-frame. This little pleasantry is repeated—for no particular reason—in the eyes of the large head of Christ, engraved on wood, attributed to him.1 Dürer experimented with both etching and dry-point, giving a strong impulse to those processes. His "Holy Family," and "St. Jerome in Penance," executed entirely in the latter medium, show with what freedom and delicacy he could work. The want of aërial perspective, of the impression of distance, in his engravings may perhaps partly be explained by the fact that some of them, the "Virgin with the Pear," for instance, are cut with deep lines, thus making it possible to print a greater number of impressions than if the execution were more delicate. But such treatment is apt to produce a metallic, hard appearance in the print. And that is exactly what this improvement in technique was in time to lead to, although it took several centuries to come to its culmination of cold regularity. Dürer was one of the giants in this art, not only in technique, but in the matter of national and individual expression. His carefulness in execution. expended lavishly on every detail, his abundance of clean, clear line work, in the hands of a less gifted man might have degenerated into an exercise of skill for the mere love of it.

But the individuality, the genius, of this man pervades his work absolutely. This is felt when looking at the work of Egidius Sadeler (1575-1629), for instance, who engraved the "Virgin with Animals," after Dürer. He has more aërial perspective than Dürer, yet he lacks the latter's power. Dürer's "Adam and Eve" and three of his most famous plates—the mysterious "Melancholia," which has given rise to



THE RAT CATCHER.

Line engraving by Cornelis Visscher.

(17th century.)



THE MASSACRE OF THE INNOCENTS, Line engrewing by Marc Antonio Raimondi, (Early 16th century.)

This print is supposed by Zani, Passavant and Lippmann to be the original, a similar one with a little fir-tree in the upper right corner being a copy. On the other hand, Barseh and Delaborde call the latter the original and the present one the copy. The Exitish Museum had the "fir-tree" print reproduced as Marc Antonio's work; Lippmann the other. Kristeller and others believe both to be by him.

much discussion, without disclosing its meaning to general satisfaction, "The Knight, Death and the Devil," which has been interpreted as the Christian Knight "passing resolutely through the terrors of this mortal life," and the delightful "St. Jerome in His Cell," with its masterly depiction of the sunlight filtering through the small panes of the windows, and its lovingly detailed description of the interior—are among the masterpieces of engraving of all time.

His influence, not only in Germany, but in the Netherlands and Italy, was considerable, and his work was much copied.

After Dürer, in this sixteenth century, the group known as the Little Masters, notably Albrecht Altdorfer, H. S. and B. Beham, Georg Pencz, Heinrich Aldegrever, stands out prominently. The small engravings of Altdorfer and the Behams, with delicately executed detail, depicting scenes in sacred and profane history and in every-day life, and showing the influence of classical and Italian art in the ornamental motives, give "intimate expression to the tendency of the time, with its preference for the minute and delicate." It is worthy of note that Altdorfer's etchings of pure landscape, which really show more aërial perspective than Dürer's, are said to be the first ones made, and these, says W. B. Scott, in his "The Little Masters," justify his "claim to be considered 'The Father of Landscape Painting."

National characteristics are strong in all this work, and show both in the treatment of subjects as well as in the style and design of execution. Barthel Beham's "Virgin at the Window" is a simply de-

lightful, unaffected—I had almost said artless—picture of a scene in domestic life. However, just as the formative causes of national or individual character or action are complex, so in art you cannot usually put your finger on the work of some school or artist and designate it as absolutely *sui generis*, without admixture of foreign elements. So here, the Southern spirit came in to modify the Northern.

Sidney Colvin says of Hans Sebald Beham: "In religious pieces, in classical subjects, in fable and fancy, in ornamental pattern, in scenes of peasant labor or peasant merriment and debauchery, he exhibits always the same characteristic cross or alliance of the old German plainness, toughness, grit, with the new Italian style and correctness of design." Moreover, the influence was to an extent mutual. We see that in the relations between Dürer and Marc Antonio. And even earlier, the influence of Germans, such as the Master E. S. of 1466, may be traced in Florentine engravings.

The tendencies shown with such skill by the Little Masters were reflected in the work of lesser lights, Brosamer and a swarm of anonymous men. In these days, too, Lautensack began to practice the combination of line-engraving and etching, gaining desired effects more quickly. Facilitated production brought forth a class of mechanical purveyors of the art market. Yet much of their work had decided merit, and in all these views, ornaments, pattern-books for designers, book-illustrations, allegories, emblems and portraits, there is much that is of artistic and technical as well as of historical interest. The names of

Jost Amman and Virgil Solis stand out somewhat prominently.

In the Netherlands, in the early part of the sixteenth century, Lucas van Leyden played an important part in art. His engravings show him to have been influenced successively by Dürer and Raimondi. The large "Ecce Homo" is a good example of his careful work, lively characterization and skill in grouping and distributing figures, as is also "The Dance of the Magdalen," considered his masterpiece. In some of his plates the landscape background and the sky are quite subordinated, put in with a lighter touch, showing attention to the matter of aërial perspective, an unusual proceeding in his day. As we have seen, the lack of this latter element is noticeable in much of the early work, even Dürer's, foreground, middle distance and background being all put on the same plane.

The strong influence which Italy at this time exercised upon Leyden and many other artists of his land does not appear to have always had the best results. The grafting of Italian ideals on the native Dutch stock of national feeling was hardly an entirely successful operation. But while this influx of Southern ideals was forming its phase of the development of Dutch art, some engravers were still upholding northern traditions, and the influence of Dürer is felt. Of the three brothers Wierix, Jan, the eldest, executed a copy of Dürer's "Knight, Death and the Devil" at fourteen, thus rivaling Lucas van Leyden in precociousness. There is quite delicate engraving in the faces of the large portraits by Hieronymus Wierix.

The development of Dutch and Flemish painting

toward the end of this century and the beginning of the seventeenth undoubtedly helped to foster this national impulse in engraving, exemplified especially in the work of Hendrik Goltzius (1558-1616). It is the remarkable technique that fascinates in this artist's plates, his wonderful command of the graver, ranging from the close-lined detail-work of Dürer and Leyden and their followers, to the broad, sweeping style which, as we shall see, Agostino Carracci inaugurated. His suggestion of texture and impression of color should be specially noted. Where he followed foreign influence, as in some of his figure compositions, his mannerisms indicate the spirit that eventually tried to show vigor by reveling in an exaggeration of action into theatrical pose, of physical strength into hypertrophied muscular development.

What I say here and elsewhere in pointing out weaknesses must not be interpreted as an attempt to smash reputations, or to dim the lustre of names which have radiance to the eyes of many. We are not to think less of the work of men thus singled out, but we may think more about it. We like our friends despite their weaknesses, and we can enjoy the good qualities in the works of certain engravers without overlooking their faults. We can appreciate the lines which were put down with the definite purpose of expressing something, without losing sight of the fact that others were graven with no such definite purpose. We are not indulging in indiscriminate hero-worship but are becoming acquainted with artists of human virtues and faults.

Furthermore, we must not forget that the process

is a form of artistic expression, with inevitable forms which in the hands of a master remain a means to an end.

"Aha," I may be told, "then all this talk about formality of line was uncalled for, since that quality is a necessity."

Not quite. The engraver cannot get away from the limits of his tools. Neither can the painter. But what a scale of differences between the finest paintings and a poor daub. How many grades of artists between these two extremes, in whose work we find much that is worthy of our attention. We have the same state of affairs in engraving. This can be illustrated without going to poor work. Take plates by three men of note, who will be considered more fully later.

Nanteuil's "Bellièvre," G. F. Schmidt's "Mignard," J. G. Wille's "Boy blowing soap bubbles." They rank in the order named. See how in Schmidt's plate there is just a little more use of the line for its own sake, and how Wille employs it thus quite frankly, producing a table, for instance, that might be made of any hard material you please, for the regularly cross-hatched lines tell little. Yet no one would accuse Wille of weakness, despite his mannerism. The very nature of the work tends to place so strong an emphasis on neatness and precision. It lies with us to discern the spirit in which the engraver has set down his lines. And this may be done, with a little practice, a little developing of insight.

Goltzius, whose work has led us into this little digression, was an artist of remarkable adaptability to

the style of others, and of a decided personality at the same time. His manner is shadowed by his pupils, Jan Saenredam, Jacob Gheyn and others, some of whom, with all their ability, could not repress the tendency to indulge in lines whose vigor and dash were expended in saying nothing.

An interesting phase of the development of engraving in the Netherlands in the seventeenth century is the influence of Rubens, who directed a number of engravers, infusing his ideas and style into their work. They reproduced his paintings in a brilliant and characteristic manner, with a vigorous, free execution, with bold sweep of line. This remarkable school of engravers whom he thus gathered around him in close relationship included especially Pieter Soutman, Lucas Vorsterman, Paul Pontius, Schelte à Bolswert, Pieter de Jode and Jan Witdoeck. Adolf Rosenberg devoted an illustrated folio volume to their important activity.

While this rich influence was at work in Antwerp, a few Dutch line engravers were perpetuating some of the paintings of this flourishing period of Dutch art. Cornelis Visscher was one of the most distinguished, and that not only in his own land. Beside his spirited portraits and his plates after the *genre* paintings of Ostade and others, he produced some original figure pieces inspired by these artists, particularly the "Ratcatcher," executed with breadth and vigor, which has been frequently chosen as an illustration in books on Dutch art or engraving.

There was Jan Suyderhoef, too, in whose portraits after Hals and Rubens the clothes are covered with the then already common practice of mechanical and often

meaningless cross-hatching; but the faces and hands are done with an absolutely free touch, giving the effect of an etching, and most happily reproducing the style of that placer of strong brush-marks, Frans Hals.

Then, too, there was Abraham Blooteling, using cross-hatching even in the shadows on the faces, but in fine lines and with restraint. His portrait of Admiral Egbert Meesz Kortenaer, a bluff, fine, pompous old sea-dog, is well known and well executed. In the next century, the eighteenth, one of the few Dutch engravers who deserve notice is Jacob Houbraken, who in his many portraits attains a sort of dead level of excellence

Meanwhile, the Italians had been developing the art in their own way. The very early Florentine work of the fifteenth century was mainly in outline, with suggestions of the goldsmith's touch; soon after came the use of straight parallel lines for shading.

A number of these early engravings, including the so-called tarot cards, have been ascribed to one Baccio Baldini. Modern research has cast doubts on this authorship, but the name may do to bind together work which shows affinity and similarity of style. Among the Baldini engravings are those in an edition of Dante of 1481, which, on the one hand, have been characterized as indifferent, and, on the other, praised in superlative terms. These Dante illustrations are from drawings by Botticelli, who appears to have had a decided influence on Florentine engraving in his day. Botticelli's original drawings for the "Divine Comedy" were reproduced in a large folio issued by the Royal Museums in Berlin, and students

of Dante in this country have in recent years paid increasing attention to them.

It is not in Florence, however, but in Mantua that the greatest master of engraving in Italy in the fifteenth century is to be sought. That is Andrea Mantegna (1431-1506), who made most noticeable use of parallel, oblique, uncrossed lines. These lines, which do not follow the curves and contours of the object depicted, as they do with Dürer and other Germans, help to give an aspect of severe seriousness, a stern grandeur of style, a sculpturesque effect, which is in accord with the classic tendencies of Mantegna. The "Entombment" is a plate in which these characteristics are particularly apparent.

As Mantegna had his sphere of influence, so also did the schools of Milan, Venice and Verona set their stamp on Italian engraving of this period. In Venice there were Jacopo de'Barbari (the "Master of the Caduceus"), who adopted German technical methods, and forms an important link in art between the two countries; Giulio Campagnola, who gained softness of effect by scattering dots between his lines; and Girolamo Mocetto, who engraved his lines in a free, uneven way, a little crude, but vigorous. Thus, various tendencies are felt in Italian engraving during this century, tendencies inspired by local schools and by individual artists, for it has been pointed out that the connection between engraving and painting was a predominant feature here from the first. Beside these already mentioned, Domenico Campagnola, Nicoletto da Modena, Benedetto Montagna are names which stand out with some prominence.

With the sixteenth century there came Marc Antonio Raimondi. Hitherto line engraving had been practiced mainly as an art of original production, as painter-engraving. Marc Antonio practically established line engraving as a reproductive art. For such work he was especially well fitted by his rare power of adaptability. Decidedly influenced by the German engravers, he developed an individual style, with much technical skill. His means are still simple as compared with the elaboration of later Italian work. though he does use cross-hatching sparingly. Marc Antonio's best work was that in which he preserved many of Raphael's drawings and sketches, such as the "Adam and Eve," and the "Massacre of the Innocents," interpreting them in the spirit of the originals, with beauty of line and sometimes suggestion of tone, with a rare reserve and a resultant economy of line.

Raphael's direct interest in the production of these prints illustrates a condition more strongly emphasized later by Rubens, or still later by J. M. W. Turner.

Marc Antonio's influence was great and far-reaching, and is felt even when it became modified by other factors. The list of those who based their technique upon his is a long one, and its ponderous procession in the dictionaries of engravers (Bartsch, and Nagler, and Le Blanc) may well be left undisturbed on the whole, until information is needed about one or the other in the course of one's wanderings among prints.

A reference, as usual, to a few particularly noteworthy ones will suffice. There were Jacopo Francia and Agostino de'Musi, Marco de Ravenna, the Master with the Die, and Giorgio Ghisi (1520-82), who in his attempt to combine the characteristics of Marc Antonio with the treatment of the Germans, attained more delicacy, perhaps, than the Italian master, more definiteness of texture, yet lacks the spirit, the dignity, the consummate art of the latter.

The business of publishing engravings now was extensively developed, and the engraver became completely dependent on the publisher, who himself was often an engraver, and usually one of no great skill. A similar domination of the commercial spirit is felt likewise in other countries, and this spirit hovered over the decline of the art at the end of the nineteenth century.

There was no lack of activity in Italy during the seventeenth and eighteenth centuries, but there are only a few masters of special importance. Agostino Carracci (1557-1602) introduced a style of engraving in which cross-hatched lines laid in large strokes, well apart, followed the outlines of the object represented, growing thicker in the shadows. It was a grand style, with big gestures and exaggerated muscular development, but with no attempt at niceties of execution, rendering of textures or impressions of color or tone, a masterly rendition on copper of his style in painting. Much of the activity of the Italian engravers of the eighteenth century was directed toward the reproduction of the works of the old masters. In this field an important part was played by Giovanni Volpato (1738-1803), and much more by his brilliant pupil Raphael Morghen (1758-1833). The latter's most famous engraving is the "Last Supper," after

Leonardo da Vinci. In tone and textures this plate is certainly fine. The hardness of line is subdued, and there are delightful details, such as the luminous delicacy of the tablecloth or the pleasing, low-toned bit of landscape seen in the background. Morghen's work is usually low in tone, reserved as it were, and has dignity; some of it is notably good in the flesh portions, a specialty in which Porporati gained great proficiency. It is well to regard the general effect of Morghen's engravings, and not to look at them closely enough to be irritated by the sometimes cold regularity of the reticulations formed by his lines. Longhi, Toschi, Gandolfi and others who came after. carried on the traditions of their predecessors in Italy, and were vet a little more soft, more insipid, more languid. They had grace with little sparkle; a cold, gray, somewhat spiritless sureness in execution; a well-tempered suavity and serenity that lacked the snap of reserve strength. They maintained the dignity of the art in a creditable way. The important service which they rendered in disseminating the knowledge of the masterpieces of painting must not be overlooked

The efforts of Jean Duvet, Etienne Delaune, Woeiriot, Ducerceau, Frenchmen of the late sixteenth and early seventeenth centuries, are not without interest. A definite tendency does not appear to make itself felt until a growing popularity of engraved portraits furthered the development of that specialty in which French engraving was to celebrate some of its finest triumphs. Claude Mellan (1598-1688) had some influence on this phase of French art. His extraordi-

¹ Despite faulty drawing and a halting, restless technique, Duvet holds one by interpretative strength.

nary technical skill in the use of vigorous lines, widened at the shadow, and not crossed by others, enabled him to execute, in his famous "Veronica's Handkerchief," a head of Christ in a single spiral line beginning at the tip of the nose. The tendency has usually been to regard this rather as a curiosity that really was not needed to lend emphasis to the undoubted value of his engravings. His contemporary, Jean Morin, in portraits such as that of Vitré, employed etching on face and hands, producing a peculiar freedom and richness of effect. In the work of Gérard Edelinck, Robert Nanteuil, Antoine Masson and the Drevets, the brilliancy of this period of French portraiture on copper is made manifest. Charles Sumner sang a hymn of praise to their productions in his pamphlet on "The Best Portraits in Engraving." 1 Their portraits, executed sometimes after paintings by others and sometimes after the engravers' own drawings (especially in the case of Nanteuil), are characterized by brilliancy and delicacy in execution, a remarkable technique and a wonderful skill in rendering textureswell restrained in order to preserve harmony. The draperies, the laces and silks, the carved wood and other textures, are rendered with realism, but subordinated to the faces, which are engraved with great delicacy. In these plates the great ones of France of that day pass before us in undying and imposing distinction, though some of the subjects are long forgotten and dead to any fame save the reflected glory they can get from these fine products of the line engraver's art.

They displayed the character of their sitters, too,

¹ In 1910 there was published an exhaustive study of "French Portrait Engraving of the Seventeenth and Eighteenth Centuries," by T. H. Thomas.



PORTRAIT OF POMPONE DE BELLIÈVRE.

Line engraving by Robert Nanteuil, after Charles LeBrun.



CARDINAL BENTIVOGLIO.

Line engraving by Jean Morin, after Van Dyck.

Morin used etched dots on the flesh portions of his portraits, attaining a richness and delicacy and freedom which sets his work a part from other engravings of his time.

these old French engravers. Look at Nanteuil's "Richelieu," for one, and see how the nature of the Cardinal is fairly laid bare in this unobtrusive but quietly powerful print. A similarly delightful characterization is seen in his little head of Cardinal Mazarin, the one drawn by him from the life in 1659, and showing the cardinal's monogram in the lower right corner. Nanteuil's "Pompone de Bellièvre," Edelinck's "Philippe de Champaigne," Masson's "Brisacier" and P. I. Drevet's "Bossuet" were once considered the four finest portraits ever engraved. As a matter of technical interest it is worth noting that the white lines in the hair of the "Brisacier" are, of course, produced by carefully cutting around each one of them, so that they stand out in relief. That is, the white hairs are the surface of the plate, the intervening black lines having been cut away.

In this best of French work we see illustrated again the fact upon which I have been harping, that you can hardly get any line engraving without some conventionality of line, that this formality, though present only in subdued form, is a necessary characteristic of the art, and that we must adjust our appreciation of an art to it as it is, and not as it might be if it were something else.

Of these great portrait engravers the Drevets take us well into the eighteenth century.

That period is reflected in all its elegance, brilliancy, luxury, light-hearted gayety and tolerant moral consciousness in the works of the painters of the period. Their canvases in turn were disseminated in repro-

ductions on copper by a group of engravers who admirably illustrate French characteristics in the grace and skill with which they set before us the France of their day as seen by its painters. The romantic art of Watteau, idealizing the daily life of the nobles, transporting them to enchanted isles, to pleasant regions where the sky is ever blue; the sentimental moralizing of Greuze, with its apparently unconscious voluptuousness, which becomes quite conscious with the decorative Boucher; the more elegant and graceful lightheartedness of Fragonard; the totally different art of Chardin, who pictured the life of the middle class in its homely virtues with a refinement and dignity and truth, and a reserve which, it appears, for a while helped to obscure his great talent beside the more brilliant qualities of his contemporaries (although more recently there has arisen a renewed interest in his work)—all these things employed the burins of skillful engravers. Tardieu, Cars, Aveline, Le Bas, Robert Gaillard, Surugue, Brion; De Launay, master of the estampe galante; Nicolas de Larmessin, Flipart, Lépicié, Jean Massard, Voyez and Simonet rendered these paintings with sympathy and intelligence. Landscape art, in Claude Joseph Vernet's large canvases, was successfully reproduced by the burins of a number of engravers, as were also paintings by the old masters.

It was for France a glorious century of line engraving, as it was for England a brilliant period of mezzotint. Engraving even became fashionable, and people of rank wielded burin or needle, among whom the Comte de Caylus exercised a decided influence on art.

A delightful by-product of this French skill is found in the numerous book-illustrations, vignettes as well as head and tail pieces, engraved and etched by Joseph de Longueil, C. E. Gaucher, J. B. Simonet, Nicolas Ponce and others from designs by Moreau le jeune, P. P. Choffard, H. F. Gravelot, C. P. Marillier, Charles Eisen, Augustin de St. Aubin, Lavreince and the younger Cochin. Most of these productions were small in size, finished, neat, graceful and delicately etched, for the needle played an important part in their production. On the whole, they were marked by grace rather than by any remarkable power of characterization or expression in the individual faces.

These illustrations, together with the larger plates in which Moreau and others produced a veritable "comedy of manners," form the subject of a large and copiously illustrated volume by Lady Dilke, "French Engravers and Draughtsmen of the Eighteenth Century" (London, 1902). A useful record of the artists of this period, in alphabetical arrangement, is Portalis and Beraldi's "Graveurs du Dixhuitième Siècle"; and J. Lewine's "Bibliography of Eighteenth Century Art and Illustrated Books" (1898) is a guide, with prices, to collectors of English work as well as French.1 Another of the many works dealing with this period is Wm. Loring Andrews's "A Trio of Eighteenth Century French Engravers of Portraits in Miniature: Ficquet, Savart, Grateloup" (1898), a work now very rare.

A noteworthy example of proficiency in the technical side of pure burin engraving was J. G. Wille, who had many followers. The precision and mathe-

¹ See also L. Delteil's "Manuel de l'amateur d'estampes du 18° siècle" (1910), and particularly H. Cohen's "Guide de l'amateur de livres" (6th edition, 1912). F. Courboin's "Histoire de la grayure en France" (1923-4) is a richly illustrated book.

matical regularity with which he engraved his lines, freely cross-hatched, with "imperturbable deliberation and cold skill," was an expression of the spirit that led to the decline of the art. His "Good Woman of Normandy" is a characteristic example of his style at its best, and his "Paternal Advice," after Terburg, is famous for the skill with which the dress of the lady in the foreground is rendered. The metallic effect of his execution and his feeling for textures coincided in the reproduction of a remarkably "lifelike" metal pitcher in the window of "La Ménagerie Hollandoise" after G. Dow.

In the eighteenth century the mezzotint reigned in England. But there were three line engravers of merit—Robert Strange, William Sharp and William Woollett. The earliest English-born engravers of note, William Rogers and Thomas Cockson, had been soon followed by others in the seventeenth century—William Marshall, William Hole, Francis Delaram and particularly William Faithorne.¹ Their work is well described in Sidney Colvin's "Early Engraving and Engravers in England (1545-1695)." Then, toward the eighteenth century, came the invention of mezzotint, and line engraving was crowded into the background.

Of the three exceptions of note whom I mentioned, Robert Strange, notwithstanding the formal regularity of his style, avoided the metallic quality of the later Frenchmen. His softness in execution is noticeable particularly in his flesh tints, which have been praised with good cause. Firm modeling of flesh appears in his plates after Titian and other old Italian

¹ The New York Public Library possesses the most noteworthy collection of Faithorne's prints in America.

masters. The fine portrait of Queen Henrietta after Van Dyck is a good example of his treatment of draperies and textures. William Sharp also maintained traditions of the past, and, like Strange, he numbers among his best works a portrait of Charles I., his showing three heads on one plate, right and left profiles and front view. His portrait of John Hunter is equally noted. He employed much cross-hatching, and is somewhat harder in his touch than Strange.

Woollett devoted himself especially to landscape. making a skillful use of the combination of needle and burin, particularly advantageous in landscape work. His "Death of General Wolfe" and "Battle of La Hogue" are his two most famous prints; and his engravings of Wilson's "Phaeton" and of Claude Lorraine's "Roman Edifices in Ruins" illustrate both the vigor and delicacy of his art in pictorial, dramatic effect and fine gradations of tone. He did not have the exceeding fineness of line of some of the later men, who did the "French Coast" series after Turner, but there was a bigness about his work that achieved both strength and delicacy. His plates, too, are large, and therefore demand a breadth of treatment that would be out of place in one of the small vignettes in Rogers' "Italy."

It is an important point, this adaptation of method to purpose. The sculptor would not put into a large figure to be seen on the top of a building the same finish that would be bestowed on a statuette to be examined close by. Nor would an easel picture of a Dutch interior be treated in the same way as a decorative painting for a high ceiling. Woollett's large

plates should not be scanned closely to take in all the details of workmanship. When held off a bit, the fine effect of cloud and sky, for instance, is obtained without having to see the means used to produce the effect, the broadly laid lines, quite far apart. These lines will disappear, as do the blots of color in the painting of the impressionist, when the beholder gets to a proper distance, instead of putting his nose to the canvas and then wondering why the artist has put such meaningless spots of color there.

William Hogarth may also be mentioned here, although his plates really mean little in the history of engraving. They are vigorous, and a little crude. His importance lies in his power as a satirist and inculcator of moral lessons. His paintings were generally copied by other engravers.

I have occasionally referred to the older print publishers. Among them Boydell was a notable figure. Himself an engraver and a person of importance in London, which city he served as alderman, he carried on an important publishing business. He commissioned artists to paint pictures for the express purpose of having them engraved, and issued the famous

"Shakespeare Gallery."

In Germany, as elsewhere, the demand for portraiture resulted in an avalanche of prints in the seventeenth and eighteenth centuries. Many of these were produced in what we may well call engravers' shops. Others rise above the level of the average, among them, in the seventeenth century, the works of Kilian, Falk, Küsel, Egidius Sadeler and the Merians, known by their numerous views of places; it was from

Matthäus Merian that Wenzel Hollar, the etcher, learned to do landscapes.

There is a wealth of material here, though the work of no great master. Especially are there interesting portraits of notabilities and views of cities, things to interest especially the collector of prints for their subject-matter, but, nevertheless, full of pleasant little surprises also for the student of engravings as objects of art.

The influence of French engraving in the eighteenth century extended also to Germany, and a noteworthy product of this amalgamation of French style and German spirit was Georg Friedrich Schmidt (1712-1775). He was an engraver of great ability who produced such realistic masterpieces as the portrait of the painter Mignard, 1744. In his work, too, we find the careful and unfailing choice of the proper lines to express texture, the almost mechanical ease of execution, which we have seen in the works of his French contemporaries. Subsequently he laid down the burin to take up the etching-needle. In this new field he was strongly influenced by the work of Rembrandt. And, though one still sees the effect of his practice of tracing regular lines on the copper, he produced some etchings of remarkable brilliance.

Other exponents of the French style were two pupils of Wille—J. F. Bause, whose work will be particularly prized by collectors of portraits, and J. G. Müller. The latter's son, Friedrich Wilhelm, is best known by his "Sistine Madonna," after Raphael. It is said that the publisher who had commissioned it refused it when finished because the too delicately

cut lines would not yield him a sufficient number of impressions. The lines had to be deepened, and when the arduous task was finished the engraver became insane and died on the day the first proof was printed. The engraving, though harmonious and effective, shows us not so much the spirit of Raphael as that of Müller, influenced by his time. It is again the story of conventional line-work, of classical traditions built up into a system.

In this whole matter of considering the functions of line engraving as illustrated in its development, it is not so easy to be consistent or coherent. One is naturally influenced by what is before one at a given time. If you are carefully studying the earliest Italian work you may get to regard it so lovingly that you share Ruskin's enthusiasm. On the other hand-but still keeping in mind only the best work of any kind —if you are familiarizing yourself with the delicate work of such plates as those in Rogers' "Italy" or the little "Verona" by W. Miller, after Turner, you will admire and appreciate the artistic and reserved employment of the richest resources, the utmost finish of which the burin is capable. Each in its time. Art is, after all, an expression of the period. It lies with us to accept that expression in its noblest form.

With the introduction of steel plates, about 1820, and steel facing, the art increased in popularity. For several decades it was extensively used for illustrating, often in a combination of line and stipple. There were "Byron Beauties" (1836), "Waverley Gallery" (1840) and similar collections prepared under the superintendence of Heath, or Finden, or

some other noted engraver of the day (for cooperative effort naturally arose to supply increased demand, just as it flourished centuries before in the studios of painters whose pupils aided them in their work, or in large wood-engraving establishments). There were "annuals" galore, with frontispieces representing the pretty, insipid, long-curled beauties so admired in those days. There were gift-books, "an elegant accession to the drawing-room table," as one advertisement puts it. Even Greenwood and Auburn cemeteries were each pictured in a sumptuous volume!

The general run of this work, smooth, nice, "highly finished," says the title of "Gems of Beauty," elementary in its expression of obvious sentiment, was an embodiment of mere and undiluted craftsmanship. Commercialism and the desire for cheaper and more rapid methods naturally favored this attitude, and we find an immense amount of dull work as the legacy of the first half of the nineteenth century.

But it was not a period of entirely unillumined sterility. The large "framing-prints" after story-telling pictures by Landseer, Wilkie and others were often very well done, and in such cases had the same justification as the originals which they reproduced. Moreover, they tended to spread a taste for good pictures. They must have done that by the very force of comparison, for there was in those times so much execrable telling of stories by third-rate designers and fourth-rate engravers that one turns with relief to these adequate representations of stories well told by painters who had the ability to do it. On the principle of getting the best of whatever you like,

it was certainly a good thing to have these able engravers aid in accustoming the public to see and appreciate the story-telling picture, the *genre*-piece at its best.

Let me say, parenthetically, that one need not quarrel with tastes. It is not so much a question whether certain modern artists and critics are right in denying the highest place to pictures which have the literary interest. As a matter of fact, one is apt to choose the golden mean, for the heart will yearn for that touch of human sympathy which the sort of picture which we are now considering offers in an obvious and easily grasped form.

The question, however, which each one should put to himself is rather: what is my attitude toward this art? Is it that of the amused spectator who laughs at the joke in the picture and passes on? Or who sheds the metaphorical tear over the sad sentiment or thrills with the dramatic action of the tale unfolded by the artist? Is the point of the story all I look at and does the art mean nothing to me? Do I pay any attention to the manner in which the story is told, beyond noting, in passing, that the painter has properly crossed his t's and dotted his i's, making a clean job so that I will not have to strain my imagination? Does the engraver's art mean so little to me that I will not take offense at a mechanically executed and muddily printed engraving, so long as the point of the joke, or the romance, or the homily be preserved?

The inference is obvious. Enjoyment of a delightful bit of humor in Molière, or Cervantes, or Shakespeare is different in degree from that which pro-

duces the unthinking guffaw at sight of the antics of a horse-play comedian or a green-whiskered stage libel on the Irishman. In other words, prints should be enjoyed understandingly. That will not lessen your enjoyment; it will simply make it more keen. Enjoying art in such a spirit is to make emotions and thought go hand in hand. And in that process, inferior art will recede from estimation, which will quite inevitably hold on to that which is good.

There is plenty more good line engraving worthy of attention in the period of the last century which we have been considering. Much of it is described in Vol. II. (1891) of the four-volume folio work on "Contemporary Graphic Art," published by the Gesellschaft für vervielfältigende Kunst of Vienna, unfortunately, for English readers, in German, but well illustrated. In fact, I know of no other book that covers the same ground as this. It gives a remarkably interesting review—even if you look at the illustrations only-of the best that European line engraving has produced in the nineteenth century. Even in that limited period, there were not only a number of artists who rose decidedly above the plane of mere craftsmanship to which, as we have seen, there was a natural tendency, but there was great variety in the use of technical means, a variety due to the manner of the individual engravers, as well as to adaptation of means to the particular work that was being reproduced.

Remarkable softness of effect was achieved by some of these modern engravers, tones that almost subdue the coldness of material and method. There should

be mentioned Ch. Bellay, A. Boucher-Desnoyers, engraver of the noted picture of "Napoleon in His Coronation Robes" and "Belisarius," both after Gérard, A. Didier, Calamatta, A. Blanchard, Henriquel-Dupont, identified with the Société Française de Gravure, which issued one hundred plates in pursuance of its mission to revive the fine art of line engraving, F. Gaillard, Jules Jacques, Ed. Büchel, G. Eilers, O. Seidel and Ed. Mandel, who once asserted that when he died there would be no more engravers. And in England, G. T. Doo, or the engravers who did the plates after Turner in the latter's "Southern Coast," George Cooke, Horsburgh and William Miller, who showed such masterly delicacy in the sky of "Portsmouth" and "Clovelly Bay." Such work, with its refinement of line and insistence on tone, verifies the statement that "tone line engraving of landscape is an achievement of the nineteenth century."

In the United States, beside much inferior portraiture finding its lowest level of smug neatness in certain local histories or similar subscription books, products of the vanity and the pocketbooks of those depicted, there is also much to be contemplated with a pleasing degree of satisfaction. Bank-note engraving became highly developed, and in its service were enlisted some of the most able men, particularly Asher B. Durand, successively engraver, portrait painter and a noteworthy figure among our earlier landscape artists; also James Smillie, among whose plates are the large ones of Cole's "Voyage of Life" series. They did many fine plates, portraits and landscapes. R. Hinshelwood, Alfred Jones, Charles Burt and

others hold honorable rank. Some of them had to do pot-boilers in numbers. They, too, produced large framing prints similar to the English "story-telling" pictures, such as "Lady Washington's Reception Day," by Huntington, or "On the March to the Sea," by Darley, both engraved by A. H. Ritchie; "Bargaining for a Horse," by Burt after Mount; or those published by the *Art Union*, such as R. C. Woodville's "News from Mexico," by Alfred Jones.¹

All the preceding historical notes deal mainly with general tendencies and cite only some salient individual examples. But the facts given make clear the point intended, that the historical development of line engraving is as varied in its phases as is the pleasure which can be derived from the study of it, a pleasure rich in possibilities of viewpoint and specialties. There is the delight that is offered by the review of the progress in technical excellence, as well as of the change in artistic tendencies, in dominating movements that mark various art epochs.

Despite the limitations which the handling of the burin imposes, the variety in the manner in which it is used is remarkably great. Consider even the matter of cross-hatching and no cross-hatching. What a difference there is, for example, between the straight, uncrossed lines of Mantegna and the similar lines of Claude Mellan, who lived a century and a half later, a difference in temperament, in national feeling, in point of view, in artistic language. There is the intense human interest that lies in the depth of national expression which marks plates such as those done by Dürer, or the "little masters" in Germany,

¹ For details, see "American Graphic Art" (1912), by the present writer.

or Cornelius Visscher and other Dutchmen, or those after Moreau le jeune in France, or Hogarth's moralizing series in England. And there is the satisfaction of contemplating the works of great masters in painting as interpreted by masters of the burin, perhaps even rescued from oblivion in cases where the original painting has either been destroyed or has faded away into a ghost of its former self, as has Leonardo da Vinci's "Last Supper."

And from these general aspects, one can branch out into specialties galore. For him who is attracted by the charm of the portrait, the field is large, extending from Dürer's "Melanchthon" to fairly recent work, such as Gaillard's "Man with the Pink," after Van Eyck, and showing, in national and personal characteristics of both subject and artist, the seriousness of the sixteenth-century German, the brilliance of the Frenchman of the time of Louis XIV., the sun king, the solid qualities of the Englishman or the young energy of the American of the early nineteenth century.

Or perhaps the collector is attracted by the pioneer efforts of our earliest American engravers. Paul Revere, he of the famous ride, silversmith, and engraver of a view of the Boston Massacre; Amos Doolittle, known especially by his four roughly executed views of the Battle of Lexington, or, later, the Mavericks and others, all set down in D. McN. Stauffer's two valuable volumes on American engravers, published in 1907 by the Grolier Club.¹

Similarly, historical pieces, famous paintings and other special topics offer themselves. And if one

¹ Mantle Fielding issued a supplementary volume in 1917.



LE MORCEAU DE MOSIQUE.

(From the illustrations to Rousseau's Works.)

Line engraving by Nicholas Delaunay, after Jean Michel Moreau te Jeune.



JOHN PHILPOT CURRAN.

Mezzotint by John Raphael Smith.

After Sir Thomas Lawrence.

studies or collects in the spirit of the student of engraving per se, irrespective of subject, one may be eclectic and choose the best by different artists, of diverse styles, in various lands. Or one may find special delight in definite schools, the German, Dutch or French, not necessarily admiring all, but making free and wise choice of the best and representative pieces.

In passing through this garden of delightful pleasures, the flowers of dazzling beauty should not be permitted to blind the eyes altogether to their modest sisters, putting forth their little blossoms in timid seclusion, with but a modicum of beauty to contribute to the general glory, and disclosing that only to the very observant. To stray from the highways into the little alleys and by-ways may mean to discover unexpected delights, manifestations of unobtrusive artistic personality, not strong, perhaps, but attractive at least.

The work of the small talent is justified and has its attraction, so long as it is done with thought and honest feeling and with individuality. It is the personal note that counts, not the acquired manner. Just as in life.

All that is required of the student is the will-ingness to stand in the attitude of others, to learn of and sympathize with the life and thought and views of people of other times or of foreign lands, and to strive to understand the personal standpoint and expression of the individual artist. For this last element is after all the main factor in our enjoyment of the best art of any kind.

CHAPTER IV

MEZZOTINTS

MEZZOTINT is as different as possible from the media which we have been considering. In pure mezzotint, there are no lines. Instead, soft outlines unbounded by lines, masses of light and shade. The difference is one not only of effect, but of means. In both wood engraving and line engraving on copper, the engraver works from light to dark, puts in lines to produce various degrees of shadow, various suggestions of local color or of texture, and leaves the plate untouched where he wants the high lights to appear.

The mezzotinter, on the other hand, works from dark to light. He scrapes out all the gradations from the highest light to the deepest shadow from a surface that would print black.

To prepare a copper-plate for mezzotinting, it is first worked over with an instrument known as a "rocker," or "cradle," something like a chisel or small spade with a rounded toothed edge. This instrument is rocked completely over the plate in all directions, about eighty times in all. By that time the lines of dots crossing and re-crossing each other have produced innumerable minute hollows separated by thin walls of metal, like the burr raised by the dry-point

process described in the chapter on etching. If the plate, thus evenly roughened, were inked and printed from, the paper would show a uniform tint of deep, velvety black, similar to the effect produced by heavy dry-point work in which none of the burr has been removed by the scraper. Hence the French name of the art of mezzotinting, la manière noire (the black manner). Upon the plate thus "rocked" the design is now traced, and the engraver then goes over it with the scraper, removing both hollows and burrs altogether for the very highest lights, and less and less for the successive stages between the highest lights and the darkest blacks, for which latter the plate is left untouched. The German name for the art. Schabkunst, "scraping art," is therefore characteristically descriptive. The inking of a mezzotint plate is a difficult operation, for it takes judgment and experience to know how much ink to leave when "wiping out." Inks of various shades of dark brown have often been used, giving a warmer and more effective tone than pure black.

When completed and inked, the plate is printed on a copper-plate press. In an impression from such a plate, the highest lights, where the plate has been completely scraped and perhaps burnished, so as to hold little or no ink, are represented by almost white paper. Then the gradations of shadow from the most delicate to the very darkest appear in a gradually darkening grain which in its lighter stages more or less plainly shows the marks of the rocking-tool, and shows also that this tool was used with some individuality by various engravers to suit their style as well as the

particular subject in hand. So that the style is in evidence, both in the rocking and the scraping, despite the apparent sameness of mezzotints.

The want of line in pure mezzotint causes a softness, an indefiniteness, a lack of precision and decision, that led to the occasional employment of some etched lines to supply energy. This was done at a fairly early date, but with such restraint as to be often noticeable only after very close inspection. It can be seen best in late impressions. I have before me as I write pale prints of C. Spooner's "John Manners, Marquis of Granby" (1760) and R. Houston's "William Kingsley" (1760), after Reynolds. The worn plates have yielded only a pale, grayish tone, from which the etched lines in the pupils of the eyes and around the nose and mouth stand out quite clearly.

George White has been called the first to study carefully the possibilities of a combination of etching and mezzotint, he etching the subject until nearly complete, and then adding tones with rocker or roulette. The roulette is a small wheel, with fine teeth, like a spur rowel, set on the end of a handle. When this is run over the copper, it produces lines of minute hollows, which, of course, print as dots. The roulette is used to strengthen shadows, and has been combined for that purpose with etching as well as with mezzotint. The mezzotint portrait of Lawrence, from a painting by himself, done by Samuel Cousins in 1838, shows very heavy rouletting on the coat.

In the nineteenth century there was developed the "mixed" style, in which etching, roulette, stipple and burin work were all added, sometimes in considera-

ble proportions, to give strength. But the charm of mezzotint was lost in the operation, and such a combination was generally sparingly used by the best men and in the best work.

The art underwent a great change in the course of its development. There is a great difference between the earliest known mezzotint—Ludwig von Siegen's portrait of the Landgravine Amelia of Hesse—and the plates produced in the golden age of the art in England, in the second half of the eighteenth century. Siegen, who was the inventor of the art, seems to have roughened only parts of the plate, putting in his shadows in this way from the start, so that he had less scraping than if he had rocked the entire plate. In fact, it has been said that his plates were done almost entirely with the roulette, with a background of crosshatched burin lines, as in the portrait of William, Prince of Orange.

About a dozen years after its discovery, the art became known to Prince Rupert (who did a vigorous "Executioner" after Spagnoletto) and to Theodor Caspar von Fürstenberg. Prince Rupert introduced it into the Low Countries, where Wallerant Vaillant, Abraham Blooteling, Cornelius Dusart and others subsequently practiced it. This early work is rather dark, and lacks gradation; but Blooteling produced a certain heavy richness in his best work, such as the striking and vigorous portraits of the Duke of Monmouth and Catharine of Braganza, Queen of Charles II., after Lely (1680).

The records of this art in Germany embrace the names of a few noteworthy men, such as J. E. Haid

(who scraped a portrait of Benjamin Franklin, among others), Georg Philipp Rugendas and particularly J. Pichler. The latter did a "Magdalen" and a "St. John," both after Battoni, but one of his best-known plates is that of the "Sons of Rubens," after that painter, not so delicate as the work of the English masters, a little heavier in treatment, but a good piece of work withal, luminous and effective if seen in a good impression.

While all this work, though generally not of the highest importance, is of interest, and may eventually lead to excursions down fascinating or amusing bypaths, it may be put aside with this short reference to it, so that we may get to the country which is so intimately identified with the rise and most brilliant exposition of the art, England. Introduced there by Prince Rupert, it was first developed by foreign artists who had emigrated from Holland and Flanders, Blooteling, P. van Somer and others. Then, towards the end of the seventeenth century, native-born artists adopted it, notably William Sherwin, Isaac Beckett, Robert Williams, Wm. Faithorne, John Simon, the Fabers and John Smith. Many of the engravings by these men, though decidedly creditable, are prized more particularly as likenesses of noted personages, sometimes as the only known portraits of the persons delineated.

To John Smith much of the great advance in the art was due. The rocking became more careful, and there was a tendency to richer tones, more delicate detail, more skillful rendering of textures. But it was not yet a full development; a promise rather than a

¹ The Younger.

fulfillment. There is sometimes a certain clumsiness in the vigor shown, a want of subtlety and suavity in the gradations. It is as though the arts of portraiture in oil and of mezzotint went forward hand in hand to a certain extent. The stiffness of Kneller and Lely seems reflected in the very handling of the early mezzotinters. But they soon learned to render a white satin gown with good effect, for mezzotint is well adapted to the imitation of certain textures, particularly hair and textile stuffs.

With the rise of the brilliant group of portraitists that included Sir Joshua Reynolds, Thomas Gainsborough, George Romney, John Hoppner, Sir Thomas Lawrence and our own Gilbert Stuart, there came into the art of the mezzotinter an increase of refinement, of engaging grace, of flexibility, of freedom, of breadth, in short a more perfect control of the resources of the art.

It is highly interesting, in studying these mezzotints, to find an art which has been characterized as lacking in precision, and consequently greatly limited, affording such scope for the display of individual style, of personal expression, and this despite the fact that mezzotinting has been so essentially a reproductive art. I have heard the question put more than once by those who had studied mezzotints well: "Now, do these absolutely render the original paintings?" And the questioners themselves replied with gentle doubt. More than that, it has been asserted that in some cases the mezzotint was better than the original painting. Perhaps the engraver did at times show a personality that was not the painter's. But one feels that the

spirit of the painter is there. And in the plates of so adaptative an engraver as J. R. Smith the styles of the various painters appear to be well accentuated. It is significant, too, that in some cases the painters corrected the proofs. Lawrence did it with thoroughness, having been known to return a dozen successive corrected proofs of one plate to Samuel Cousins. And Reynolds formed a collection of proofs after his paintings. It is said that on a proof by himself after Hoppner, in the British Museum, J. Ward has noted that a suggested alteration in the print was not only not carried out, but the picture was actually repainted so as to "accord to the engraver's rendering." How much of this story is to be set down as an expression of Ward's well-known high opinion of his merits, it is perhaps not easy to tell, but Hoppner apparently did set a high value on his mezzotinting.

So in some instances, at least, we have proof of the painter's satisfaction with the engraver's work, a satisfaction voiced by Sir Joshua Reynolds when he asserted that the mezzotints of McArdell and others would immortalize him. And if we find them to be very often free translations, we may be thankful that in this brilliant period of the art there was much individuality shown, and not merely dull craftsmanship.

There is great diversity of method and expression. And it is this method on which stress is laid here, rather than on biographical details, which you may get in Alfred Whitman's "The Masters of Mezzotint," in Cyril Davenport's "Mezzotints" (1903), both well illustrated, or in J. Chaloner Smith's monu-

mental "British Mezzotint Portraits" (1883), together with the books devoted to individual engravers, such as those on McArdell or Green, or the two sumptuously illustrated volumes by Julia Frankau on John Raphael Smith and the Wards.

As I pass in mental review the many fine mezzotints that have in recent years been exhibited, the characteristics of each one of those whose names are linked with the history of the art in this period of its most brilliant manifestation stand out from the softness and suavity of the mezzotint ground.

There is that group of talented Irishmen who take high rank among those who brought the art to so advanced a degree of perfection, McArdell, Houston, Fisher and Dixon.

McArdell was both brilliantly vigorous and finely delicate. There is distinction of style, rich color and vivacity of facial expression in his plates after Reynolds, Van Dyck and others. His skill in rendering textures is exemplified in Van Dyck's "Lords John and Bernard Stuart," Hudson's "Mary, Duchess of Ancaster" (note the fine satin gown) or "Griselda, Countess Stanhope" after Ramsay; yet it is not made conspicuous on its own account, but takes its proper place in the general effect. "Catherine Chambers," showing reflected light on the face under the broadbrimmed hat; "Edward Boscawen," and "Lady Ann Dawson," rich in color, are among the nearly forty plates which he engraved from paintings by Reynolds, who had so high an opinion of his work.

Richard Houston, "the first mezzotinter who realized that a scraper could be used to give the effect of

¹A "catalogue of corrections and additions" to Smith's work was issued in 1926 by Charles E. Russell, under the title "English Mezzotint Portraits and Their States."

a brush," became intemperate, was long in Fleet Prison and fell into the hands of the printers, Sayer and others. His plates vary in quality. Purcell, who signed much of his work "Corbutt," had a like fate.

Edward Fisher was once criticised by Reynolds as "injudiciously exact," but he could work with high finish, as in the costume of Lady Elizabeth Keppel, or with vigorous breadth, as in "Garrick between Tragedy and Comedy." He engraved the familiar Chamberlin portrait of Franklin with his electrical instruments. John Dixon, too, could be "delicate and refined, or bold and strong, as the subject required." His "Misses Emma and Elizabeth Crewe," after Reynolds, has been much admired.

One finds plenty of instances to illustrate variety of style and expression by the emphasis of contrasts.

John Jones is well represented in the two portraits of Miss Frances Kemble in a white and a black dress, respectively, after Reynolds. His work at times is lacking in textures, and sometimes has an unfinished effect which resolves itself into dash in his portrait of Caleb Whitefoord, one of his many portraits of men. Robert Dunkarton, on the other hand, has more finish, but does not give the same feeling of strength.

William Dickinson, again, is indeed vigorous, yet, while not finicky, gives the impression of having said enough. "His use of the scraper is particularly brilliant," says one authority, "showing well the brushmarks of the original." His "Lady Charles Spencer," after Reynolds, is rich and fine in textures. Thomas Watson shows strength in portraits, such as that of

Warren Hastings, and no saccharine sweetness in his portraits of women; among these one should see "Mrs. Crowe as St. Geneviève," both strong and delicate, and the famous "Lady Bamfylde" after Reynolds. James Watson is softer, more delicate, but not so strong, perhaps. Chaloner Smith tells us that, when not satisfied with a plate, he would do an entirely new one instead of retouching and altering it, "as would be done by a less scrupulous artist."

John Dean's work is so exquisitely delicate "that to a casual observer his prints appear weak and colorless"; but he shows richness to the observant eve-in Reynolds's "Mercury," for instance—and fine translucent shadows, as on the dress in "Lady Elizabeth Herbert and Son." "Lady Kent," after Reynolds, is a good example of his style. William Doughty laid a somewhat coarse ground, so that his flesh-tints have a granular effect. Doughty's vigor is shown in the famous portrait of Dr. Johnson. Dean was a pupil of Valentine Green, whose work was refined rather than brilliant, and whose delicacy of treatment and luminous effect are well exemplified in his portraits, after Reynolds, of "Lady Elizabeth Compton," of "Lady Henrietta Herbert," of "Mary Isabella, Duchess of Rutland," tall and stately, with stature increased by high head-dress, and of "The Three Ladies Waldegrave." He, too, could render textures without undue finish, as in the cap in his "Lady Caroline Howard"; and, in his "Family of Joseph Wright," the flesh modeling is a pleasing feature.

John Raphael Smith was one of the most brilliant, versatile and able of them all, unexcelled in variety

of treatment. His "Mrs. Carnac," after Reynolds, is indeed "a wonderful example of refined mezzotinting"; "Mrs. Elizabeth Montagu" has detail without undue finish; "J. P. Curran," after Lawrence, is bold and broad; "Louisa, Lady Stormont" shows something of the refined manner of Green, and "Miss Cumberland" some of the dash of Jones. It has been pointed out that Smith achieved success and distinction whenever he limited himself to reproducing the work of another, but was weak where he played both designer and engraver.

Each one, then, has his own virtues and faults, with his own personal touch, which we take as it stands, and which forms a subtle charm that has its share in the hold which the art has on us. And if, after all this praise, modified though it is, you find lapses from the highest criteria here and there, do not forget that an artist, too, has his weak moments, and his weak side. But the fault is not always wholly the engraver's. Sometimes a detail in certain of these fine plates may strike you as really too bad, perhaps the wooden birds which are placed in the hands of ladies in several instances. We must not necessarily jump to the conclusion that in such cases the free interpretation of the engraver has betrayed him into taking unwarranted liberties with the painter's work. If the amiable infant in Reynolds's "Mrs. Mackenzie and Child," engraved by Grozer, looks a little like a French doll, that appearance is repeated in Jacquemart's etching after the same painting. So that either the painter was a little conventional, or the little lady really looked like a fine, plump specimen of the China toy.

The art of mezzotint, with both its beauties and its faults, is of the style of the time, a reflection of the attitude of its day. Its development was coincident with, and furthered by, the growth of a national school of portraiture. The latter, profiting by particularly favorable social conditions, reflected the life of the time in individual personal instances with dignity and distinction as well as grace. And this charm was preserved with an original energy, a creative impulse, in richness of tone and charm of style, by contemporary mezzotinters. Increased possibilities of circulation make the print a messenger of art where the painting cannot go. Many of us have enjoyed these mezzotint reproductions of paintings which we have never seen.

These British mezzotints are an absolute outcome of the art and life of the time, and it is impossible to consider them without reference to that life and that art. They cannot be dissociated from the source of their being. That they mirror so well the period of British history of which they form part is one reason why they are prized so largely for the sake of the subject. They preserve not only the works of the great portrait painters of the day, and the genre subjects of George Morland and others, but also the canvases of lesser lights as well, some of them, such as Wright of Derby, mainly because their subjects and treatment offered special possibilities for a display of virtuosity in the rendering of strong effects of light and shade. Earlom's "The Forge" (1773), W. Pether's "Orrery" and Green's "Philosopher Showing an Experiment with the Air Pump," all three after Joseph Wright, illustrate this specialty of craftsmanship in chiaroscuro.

But they also bring before us a brilliant array of British individuals and types, records of childlife, interesting sidelights on manners and customs, fads and fashions in dress and sentiment and opinion.

What a gallery of great people is displayed to our view! The pomp and dignity of royalty, the distinction of nobility, the vigor and strong pose of military and naval achievement, the personal expression of literary and artistic influence, the charm of beauty and grace, all are exemplified in these portraits of the men and women who represent the social and political life of Britain in that day. Statesmen and artists, warriors and poets, fine ladies and actors, stand before us in counterfeit presentiment, all helping to make more vivid to us those days of ruffles and vigor, and daintiness and beef, of affectation and sturdy sentiment.

There is Samuel Johnson, his great mind embodied in gross heaviness, Laurence Sterne, bright-eyed and smiling cunningly, and Goldsmith—all three portrayed by Reynolds and perpetuated in mezzotints by Doughty, Fisher and Marchi respectively. Warren Hastings, alert and serious, presented by Reynolds and T. Watson; George Canning, in the portrait by Hoppner engraved by John Young; Fox, in massive strength, in the forcible character study by Reynolds again, translated by Jones, or depicted by S. W. Reynolds after Opie, and Edmund Burke, by Romney, in Jones's simple and broad engraving.

The appearance of General Robert Monckton, who was with Wolfe at Quebec, is shown in the painting by the American Quaker, Benjamin West, mezzotinted by James Watson; also that of Lieutenant-Colonel Tarleton, distinguished on the British side in the American Revolutionary War, in the brilliant, dashing portrait by Reynolds, reproduced in one of J. R. Smith's most noted mezzotints.

Not only are we shown persons in their every-day aspect, but the sitter frequently must assume a special character and garb for the occasion; or a group of personages is pictured in the guise of a genre piece. So we get family groups in unconventional portraiture, children in action, for instance, or buying fruit from a street vendor, as in H. Walton's "The Fruit Barrow" (Walton Family), engraved by J. R. Smith; Hoppner's "Children bathing" (Hoppner children) and "Juvenile Retirement" (Douglas children), both by James Ward, the first one marking the height of his achievement; "Children at Play" (Oddie children), by Thomas Park after Beechey: "Boy and Lamb" (said to be Master Wynne as St. John) by Reynolds, engraved by Dean; and the portrait of Lady Catherine Pelham Clinton as a child, feeding chickens, by J. R. Smith, after Revnolds.

More striking is the tendency to show individual sitters in characters other than their own. They pose, these beauties and children of those days, as goddesses and nymphs, as allegorical abstractions and literary figures, as "Cynthia," "Miranda" or "Hebe"; a custom, by the way, found also in France, where

Pomonas and Ceres and Floras and Ariadnes are found in the portraiture of this eighteenth century. Sir Joshua Reynolds has many of these fancy portraits to his credit. He painted Elizabeth, Duchess of Manchester, with her son George, Viscount Mandeville, as "Diana and Cupid" (engraved by J. Watson), and a good bourgeois, placid Diana she made; "Master Crewe, as Henry VIII." (by John Raphael Smith), a sturdy, red-cheeked little fellow, product of the "roast beef of old England"; "Francis, Fifth Duke of Bedford" (by Fisher), posing as St. George, to the admiration of the onlookers, and daintily tickling the dragon behind the ears, as St. George does the "Reluctant Dragon" in Kenneth Grahame's "Dream Days": Miss Searle as "The Careful Shepherdess" (a little girl with a lamb in her arms, by Elizabeth Judkins); "Lady Sarah Bunbury Sacrificing to the Graces"; and "Hope Nursing Love," said to be Theophila Palmer, both by Fisher.

The fascinating Lady Hamilton was pictured as "Bacchante" (a well-conducted one, who will not offend the proprieties), by Reynolds and Smith, and as "Nature," by Henry Meyer after Romney, whom she inspired, and who painted a number of portraits of her. Romney painted also that picture, familiar through J. R. Smith's plate, of Miss Sneyd, Major André's fiancée, as "Serena."

It is interesting and at times amusing to see these grandes dames posing as mythological characters. The masquerade is so very obvious, the ladies are so evidently anxious not to look the parts enough to appear forward or to suggest any impropriety. All is well-

ordered and without breach of "proper form." Feelings are well restrained by stays.

The artists themselves seem affected by this point of view, and even where, in "fancy subjects," portraits being absent, there is a certain freedom of expression, it is in the voice of longing languor, not in that of passionate vigor. Reynolds's "The Snake in the Grass," engraved by W. Ward, may serve to illustrate a point on which it is not necessary to insist further. But there is so much skill, and dignity, and graceful charm in all this that we are held captive, as we should have been, no doubt, by the originals of these portraits.

The portrayal of actors in rôles of course results in a more natural accommodation to the character portrayed, although one cannot get entirely away from the mixture of contemporary manners and the professional pose. David Garrick as "Abel Drugger," by Dixon after Zoffany; Mrs. Elizabeth Hartley as "Elfrida." by Dickinson after J. Nixon; Mrs. Jordan as "Hypolita," by Jones after Hoppner; Miss Kitty Fisher as "Cleopatra," by Fisher after Reynolds, are a few in a long gallery of portraits in rôles. But the actresses, too, were made to enter the realm of allegory. There is a graceful vision of Mrs. Billington as "St. Cecilia," engraved by James Ward (1803) from the painting, now in the New York Public Library, by Reynolds. This painter, it will be remembered, pictured the apotheosis of Mrs. Siddons as "The Tragic Muse," reproduced in stipple. There is, too, that fine plate by Fisher, with its delightful picture of David Garrick, smirking in indecision and mild

self-satisfaction as he is drawn hither and thither by the geniuses of Tragedy and Comedy contending for his possession.

If such amusing features are pointed out here, they do not, of course, affect the art of the print any more than costume or customs affect the world's final judgment of an individual. We recognize the strong personality of an Elizabeth, while we smile at the cumbrous farthingale which she wore; we admire the brilliant qualities of Marlborough while marveling at the devotion to fashion that could perspire under a huge wig. The painting, reproduced in the mezzotint, gives us the people of the day, with both their fine qualities and their foibles. Our same Garrick, dapper and alert, leaning complacently against a base bearing a bust of Shakespeare ("Us two," or "Me and him," the modern variety comedian would put it), may cause a smile, but the art of the painting in which he is thus depicted by Gainsborough, and the merit of the mezzotint by Green, do not.

And if we have looked at actors in the limelight's glare, in the pose and strut of rôle, we may see them also at home. So is Mrs. Elizabeth Billington pictured by Robert Dunkarton after John Downman; or Mrs. Abingdon with delightful feminine charm, by Elizabeth Judkins after Reynolds; or charming "Peg Woffington," in McArdell's fine plate after Pond. Elizabeth Judkins leads one to the parenthetical reflection that it is curious that not more women took up this art, since so many, professionals as well as amateurs, busied themselves at the same time with the more arduous task of line engraving.



LADY BAMPFYLDE.

Mezzotint by Thomas Watson, after Sir Joshua Reynolds.

A noteworthy example of the skill and sympathy with which eighteenth century British mezzotinters reproduced paintings by contemporary artists.



THE FIRST OF SEPTEMBER: EVENING. Mezzolinl by William Ward, after George Morland.

British mezzotiming, notahly identified with portraiture, dealt also with genre subjects which served British sen-timent with regard to domestic life, rural activities, and sport.

The art of mezzotinting was to a very large extent identified with portraiture. Not altogether, however. Figure subjects were reproduced; for instance, historical paintings by Benjamin West. Some attention also was given to the old masters. McArdell reproduced "Rubens with His Wife and Child"; James Watson signed "The Dutch Cook Maid" after Metsu, and other Dutch genre pieces; and Rembrandt inspired Houston, Earlom and John Dixon, as well as others, listed in J. Charrington's "Catalogue of Mezzotints after Rembrandt" (1923).

And here I must interpolate mention of two noted prints by Richard Earlom, fruit and flower pieces after Van Huysum, smooth and elaborate. Hamerton, in his "Graphic Arts," points out that the delicacy and finish of these flower and fruit pieces—"the ne plus ultra of mezzotint as far as minute finish is concerned"—is such that even the dewdrops on the leaves have their gradations, reflections and shadows.

But especially did British genre painting come into vogue in the later years of the century. It is the art of George Morland and of those who painted in his vein that completely met the demands of rustic and domestic sentiment. These pictures portray honest John Bull, the farmer, on the field and in the cottage; they appeal to the British love of sport and horses, they sing the praises of domestic virtues and the British matron, they depict fine ladies and gentlemen in town as well as in rural retirement. They call forth mental pictures dear to the heart of Englishmen. Sometimes the feeling becomes too mawkishly sentimental. Sometimes the work is a little too frankly

a pot-boiler, and a little too careless in details. But the spirit is there that made this work popular because it touched the British heart.

Morland's paintings were reproduced by various engravers, but particularly by the brothers William and James Ward, his brothers-in-law, whose style seemed particularly adapted to that of Morland. William Ward was an artist of facility, who, we are told, "engraved very quickly and got as much effect as possible with the least work." The subjects which Morland treated are indicated by the titles of some of the mezzotints, such as "The Happy Cottagers," by Joseph Grozer; "Selling Fish" and "Return from Market," by J. R. Smith; "The Travellers" (1802) and "Villagers" (1803), by John Young; "A Party Angling," by George Keating; and "The Angler's Repast," "The Sportsman's Return" and "The Farmer's Stable," by William Ward.

Others, too, painted subjects of this kind, among them some of the engravers themselves. Instances in point are James Ward's "The Gleaners Returned" (1801) and "Reaping" (1801), and J. R. Smith's bit of family sentiment, "A Visit to Grandfather," engraved by William Ward. Zoffany, in "Colonel Mordaunt's Cock-Match," engraved by Earlom, and Sartorius, in his "Shooting" (1802), mezzotinted by S. W. Reynolds, "Pointers," by W. Ward, etc., give a foretaste of the swarm of sporting prints that the first half of the new century was to bring.

If such scenes illustrate the life of the period with a more obvious directness, though not necessarily with more truth, than portraits, there is still another field,

in which the information is given to us of a later day by the force of satire. Caricature is a branch of figure work for which mezzotint was also employed in the last three decades of the eighteenth century. R. Sayer and other print publishers of the day issued series of comic prints, not always in very good taste, but throwing interesting lights on the social history of the time, as is shown in George Paston's "Social Caricature in the Eighteenth Century" (1905). The craze for such humorous mezzotints seems to have kept engravers busy, even the best men being occasionally laid under contribution by the print-sellers. But, as a rule, these prints were not marked by high artistic qualities. Their function was that of the corrective, ridiculing follies and foibles. They are interesting rather as curiosities and have the value of historical documents. A number of these caricatures were political, and some had to do with affairs in the American colonies. The latter, which are naturally of great interest to collectors of Americana and students of American history, are pictured and described in R. T. H. Halsey's "The Boston Port Bill as Pictured by a Contemporary London Cartoonist," issued by the Grolier Club in 1904.

So we can see that portraiture, genre scenes and humorous subjects, particularly the first, but always figure work, mainly occupied the mezzotinters. And the work chosen for reproduction was overwhelmingly British. There is much landscape background in the genre pieces, and in some portraits. An example of the latter is the fine sweep of park-like background in the charming group "Lady Delmé and Her Children,"

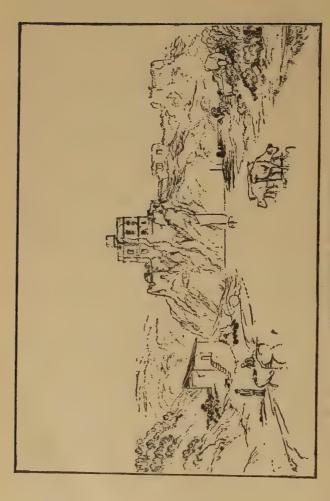
by Green after Reynolds. But landscape for its own sake we hardly find, except in the reproduction of Claude Lorraine's drawings, the "Liber Veritatis," by the versatile Earlom (who also signed a plate after R. Wilson's "Meleager and Atalanta," 1771, luminously rich), or an occasional plate such as Jones's "Petersham and Twickenham Meadows, from Richmond Hill" (1800), after Reynolds.

The feeling for landscape, fostered by artists like old Crome and Constable, came to fuller appreciation in the next century. And that feeling is expressed for mezzotint primarily in J. M. W. Turner's "Liber Studiorum." The "Liber Studiorum" is of the nineteenth century, and fills a place apart. In a timethe early Victorian period-peculiarly barren of genius, it projects itself by the force of its beauty and harmony. It consists of a series of plates from sketches in sepia by J. M. W. Turner. These plates were first deeply etched by the painter himself, then mezzotinted. The etchings were always done with reference to the final effect, and must therefore be considered as frameworks to sustain the mezzotinting rather than as examples of pure etching. In other words, they were not an end in themselves. These etched lines are so deeply bitten that in certain cases they show in heavy ridges on the paper when printed, with corresponding deep hollows in the back of the sheet. The "Jason" is a striking example of this.

Mezzotint was to Turner a convenient process for reproducing the subtle and delicate gradations of light and shade of his sepia studies, adopted after he had tried aquatint, in which manner F. C. Lewis engraved one of the plates ("Bridge and Goats"). Some of the plates were mezzotinted by Turner himself, with vigorous individuality, notably "Junction of Severn and Wye" and "Æsacus and Hesperie," the rest by professional engravers, C. Turner, Say, Dunkarton, Lupton, Clint, H. Dawe, Annis, Easling, Hodgetts and Reynolds. Some of these had had little preparation in landscape work, but engraved under Turner's direct supervision. How much that supervision meant may be seen by comparing the "Liber" with a volume of "Beauties of Claude Lorraine" (1825) done by some of these same engravers. In mastery of composition, in range of light effect, from the most tender glow of the sunbeams in the brightness of a summer day, to the darkness of the storm closing down on the last vanishing ray, in wide variety of subject, these plates are wonderful.

Take the skies alone. Light skies and dark ones; skies suffused with tender light as in "Basle" (No. 5); skies in the bright glare of the midday sun ("Twickenham—Pope's Villa") and in the mellow glow of approaching twilight, in "The Bridge in Middle Distance" or "Norham Castle," reminding one of the opening line of Marmion: "Day set on Norham's castled Steep"; cloud-flecked skies ("The Castle above the Meadows") and skies in the dark garb of the wind-whipped storm-clouds scudding over a choppy sea which reflects their darkness and the fading light, as in "Ships in a Breeze"; or heavy in lightning-streaked blackness, as in "The Fifth Plague of Egypt."

The variety in this special feature is as great as the



Etching, by J. M. W. Turner, for the Messotint reproduced on the opposite plate. NORHAM CASTLE ON THE TWEED.



NORHAM CASTLE ON THE TWEED.

Drawn and etched by J. M. W. Turner. Engraved by C. Turner, 1816.

A mezzotint from J. M. W. Turner's "Liber Studiorum."



SIR FRANCIS SEYMOUR HADEN AT 63.

Mezzotint by Alphonse Legros.

An example of modern original work.

range of subjects of these prints, which run the gamut of sentiments inspired by landscape. It is like a hymn to the sun, the great source of light, rising in promise of radiance, reigning supreme in life-giving brilliance, breaking through the clouds ("Leader Sea Piece" or "Flint Castle"), touching up a waterfall in a dark gorge so that it shimmers in sparkling light or falling aslant between the trees of the mysterious forests, as in "Æsacus and Hesperie"; shooting across deep valleys and along darkly-shadowed cliffs in magnificent play of light and shade, as in the superb "Ben Arthur"; setting in a glory of dying rays that turn the trembling motes into flickering dust of mellow gold, as in "Windmill and Lock."

The grandeur of mountain scenery, so finely handled in the rocky slopes of "Mt. St. Gotthard," is contrasted with rolling meadows or flatlands in "Hedging and Ditching" and "Solway Moss."

The imaginative setting of mythological subjects, such as the "Procris and Cephalus," the composition of which is subjected to detailed analysis by Ruskin in his "Modern Painters" (vol. 2), and the serenity of classical landscape in "Woman and Tambourine," make strong contrast with the every-day aspect of a "Farm Yard" or a wayside brook.

And how the sea is depicted! We see it in storm, with waves running before a slight breeze, dashing against the spray-worn cliffs of the "Coast of Yorkshire"; or in the peace of "Calm," a plate beautifully luminous in the golden toned ink of its third state. In this the becalmed sailing vessels again contrast in their quiet, straight lines with the life

and movement of ship, sea and clouds in "Entrance to Calais Harbor." Lupton, by the way, is said to have emphasized the difference between the artistengraver and professionals by asserting that none of the engravers engaged on the "Liber" could have reproduced the action of wind on the waves as Turner did himself. Comparison of some of these etched and mezzotinted plates with certain of the unpublished ones (Nos. 81, 82, 85, 88) which were engraved in pure mezzotint by Turner himself, will show better than many words what the advantages are of preliminary etching and what the gain is, again, in doing without it. If it is impossible to see the original mezzotints, there are the very good autotype reproductions published 1899 in two volumes, with critical notices by Stopford Brooke. The "Liber" was issued irregularly, in parts, early and late, good and bad impressions mingled. To get a set of fine impressions, it is therefore necessary to pick them out from various published sets. This has been done to produce those in the British Museum and the New York Public Library. It is only in such selected sets that the full beauty of this work is adequately shown. Comparisons between Turner's "Liber Studiorum" and Claude Lorraine's "Liber Veritatis" naturally suggest themselves, but Claude's "Liber" is a pictorial index of his paintings, in sepia sketches engraved after his time, while Turner's consists of engravings executed under his direct supervision, with effects premeditated in drawings made for the purpose, and attained under his eye. The "Liber" is a monument to Turner as a delineator of landscape.

The one other specially remarkable example of landscape in mezzotint is found in the plates by Lucas after Constable, although they are quite different in intent and effect, being reproductions of finished paintings. Lucas, too, heavily etched his plates. But this etching is not so apparent in the small plates, "English Landscape," which Constable published in 1830 and 1831. Some of these are almost in pure mezzotint, with a peculiar grain (something like that of a coarse crayon) and with a modicum of rouletting. These small plates, too, have the dark, somewhat gloomy, massive aspect, an inkiness, which has been attributed to the use of black ink. "The Lock" and "The Cornfield" are two of his finest plates after Constable, and the same artist's "Salisbury Cathedral" ("The Rainbow") inspired him to the production of what has been pronounced his masterpiece. At all events, it won the praise of the painter himself, who, it should be noted, supervised Lucas' work.

Lucas worked on steel, as did also Lupton, whose best work in landscape is seen in the plates in Turner's "Harbors of England." Lupton also did at least one vigorous landscape, if not more, after the painter John Martin, over whose "gorgeous imagination" James Huneker grows eloquently enthusiastic, and who himself mezzotinted some of his vivid conceptions of Old Testament scenes, wide sweeps of mountains and sky, teeming with armies, with angelic hosts and the hordes of Satan.

So we have come well into the nineteenth century, in which the overwhelming predominance of the portrait continued. The earlier years of the century wit-

nessed a continuance of the activity of some who either were identified with the period of the great masters of the art, or were perpetuating its best traditions. Among these were W. W. Barney, John Young, S. W. Reynolds, whose "Georgiana Elizabeth, Duchess of Bedford," after Hoppner, delicate and refined, was "not surpassed in what one may call spiritual grace," and Charles Turner.

Turner, who has been referred to as the last great portrait mezzotinter, shows much of the old spirit, and usually employs etched lines with great discretion. Vigor, brilliancy, rich textures, sound technique and nobility of style mark his best plates, among which are Reynolds's "George, Third Duke of Marlborough and His Family," and Lawrence's "Lord Castlereagh" and "Lady Wigram."

Say scraped the first mezzotint on steel, a portrait of Queen Caroline, in 1820. Lupton's experiments in his search for a more lasting material than copper led him finally to the use of soft steel. Steel has been objected to as not exhibiting the rich qualities of mezzotints on copper, the "luminous delicacy of the old work," as being flat and colorless. The dark black ink in which these steel plates have usually been printed does not contrast favorably with the ink used for the finest of the old mezzotints on copper, ink of a warm, brownish tone—decidedly brown in the case of Turner's "Liber."

Of course there is the compromise of engraving on a copper plate and then coating the latter by the electrotype process with a film of steel. This latter can be stripped off when there are signs of wear, and the plate re-steeled. To some extent, the age of steel seems to stand here, as it did with line engraving, for smooth finish and much detail.

The most noteworthy figure among later nineteenthcentury engravers is Samuel Cousins, an artist of undoubtedly great ability, with absolute command of his process, largely aided by etching and engraving. One of his finest plates, "Boyhood's Reverie" (Master Lambton), after Lawrence, well illustrates his control of his materials. He attains both richness and delicacy, is brilliant and excels some of his predecessors in the absolute rendering of texture; but, on the other hand, he lacks the rugged vigor of a John Raphael Smith. Some of the blame must be laid at the door of the painters of that day. So, when he reproduces an insipid picture like "Sunshine of Love," by Raoux, we see how all this skill can approach to the lackadaisical mushiness of the frontispiece to a "young ladies' annual" or a "floral gift" of the thirties. And, unfortunately, the weakness of an influential artist is reflected in the works of his followers, as well as his strength. The impress of Cousins seems stamped on this period. His smooth, finished, self-sure style is reflected, though with less brilliancy, in the plates of Thomas Lupton, C. E. Wagstaff, G. H. Phillips and others. This is seen in the volume of engravings from the works of Sir Thomas Lawrence published in 1836, in which the "mixed method" is very much in evidence.

This mixed method had been more and more developed since C. Turner did his "Apotheosis of Princess Charlotte." By its aid effects are easily produced

which would be very difficult with mezzotint alone. But it is a dangerous expedient in the hands of inferior artists.

The art remained identified with England as it had in the foregoing century, when it had even been called the "English Manner." In the United States it was fostered especially by two men of English birth. The first mezzotint done in this country was a portrait of Cotton Mather, engraved in 1727 by Peter Pelham, who came over from London. A century later, John Sartain, coming from the same city, in 1830, began a long career in Philadelphia as a mezzotint engraver.

In the intervening years Charles Willson Peale scraped portraits of Washington, Lafayette and Franklin; and D. Martin's well-known portrait of the last named was reproduced in a noteworthy mezzo-

tint by Edward Savage.

The work of John Sartain stands out. Much of it was produced under pressure (his portrait of Espartero was scraped in one night), for he did an enormous amount of book-illustrations, which even his facility and skill could not always raise above the commonplace. Many of his plates were printed from so much that the impressions were mere ghosts, and the copper then touched up with burin or roulette in a futile effort to restore lost richness; the effect was somewhat that of a patch upon a pair of trousers. But Sartain was an able artist, whose work shows suavity, sureness and artistic feeling. His best portraits include those of Robert Gilmore after Lawrence, Henry Clay after John Neagle (1843), Van Buren after Inman and Bishop William White after Sully, a piece of pure

mezzotint. I have myself encountered several amateurs who had accumulated large collections of his engravings—another illustration of the fact that there are plenty of by-paths for the collector. His brother Samuel was also a mezzotinter, and his son, William Sartain, well known as a painter, maintained the family traditions of skill and taste in several large plates, including a portrait of Irving after C. R. Leslie and one of Byron.

In the production of large "framing prints," such as "King Solomon and the Iron Worker" and "Men of Progress: American Inventors," after Schussele, "The County Election in Missouri" after Bingham, "Christ Rejected" after Benjamin West, Sartain himself, as well as A. H. Ritchie and others, supplied a demand similar to that answered by line engravers of the same period in their large plates after Landseer, Wilkie, Burton, in England, or Mount, Woodville or Edmonds, in the United States. And in the literary annuals, "Gem of the Season" (1846), "Forget Me Not" (1849), "Magnolia" (1855) and others beside, they found a further field for activity, producing much weak and flabby prettiness.

Mezzotint has been spoken of for years as a "lost art," but that is not entirely true. It has, indeed, been practiced under unworthy conditions, and often by unworthy artists. But to include in a general condemnation the nineteenth-century work which really shows sincerity and capability is to be unjust. The art very likely suffered from the rapid and enormous development of that branch of the photomechanical processes known as photogravure. I hear that pub-

lishers of photogravures have advertised them as "mezzotints engraved on steel," and that mezzotinters in England have found employment in touching up photogravure plates, just as a number of American wood engravers, finding their occupation gone, have deserted to the enemy and touch up the half-tone plate which put them out of their original business.

On the other hand, it is interesting to find that many of the plates accompanying Julia Frankau's books on J. R. Smith and the Wards are mezzotint copies of the old plates by modern engravers. One of these is signed by A. J. Skrimshire, whose "The Old Mill," an original mezzotint, was published in the *Artist-Engraver* for October, 1904.

But the art of mezzotinting is neither lost nor dead. It has been practiced, though by comparatively few. Particularly in England, where the names of Gerald Robinson and R. S. Clouston, D. A. and Emil Wehrschmidt, A. J. Skrimshire, George Every, T. G. Appleton, R. Josey and John D. Miller, who rendered the paintings of Lord Leighton, are among those in a group numerous enough to sustain a Society of Mezzotint Engravers.

The best work needs no apology. At most, it may be noted that some of the present-day mezzotinters attack the plate in a somewhat different manner from that of the eighteenth-century men. It would be sad if they did not, if they merely tried to reproduce slavishly the art of another day, instead of being of their own time in their own way. Even those who, like Thomas G. Appleton, devote themselves to the reproduction of portraits by the very painters identi-

fied with the art of mezzotinting at the time of its greatest popularity, and who therefore would be most likely to approach most closely to the methods of the old mezzotinters, only do so partially. Gerald Robinson's "Mrs. Robinson as Perdita" succeeds in presenting Gainsborough, as R. S. Clouston's "The Fortune Teller," after Reynolds, is quite evidently faithful to the original, and quite noteworthy in its rendering of the touch of the brush, the paintiness of the skirt of the little girl.

Flatness and want of translucency in the shadows are the principal faults laid at the door of these new men, but in plates such as these two we certainly find a return to practically pure mezzotint, and apparently the honest intention to translate understandingly without indulging in any brilliancy not in the original, and without undue reference to former practices.

It is not enough that the artist knows and respects the limits of his art, he must learn its resources within those limits, its adaptability to the task before him. The question is whether mezzotint is absolutely and only adapted to the period to which it has become so wedded in our mind. If the modern mezzotinter finds new qualities, finds that copper and rocker and scraper can be made to tell new things and the things he tells are worth listening to, we need not be restrained by preconceived notions of how a mezzotint should look. We should rather try to adapt ourselves to new conditions.

Interesting examples of the modern application of the art to the rendering of modern paintings are seen in two plates by Richard Josey after Whistler—" Rosa Corder" (1880) and "Carlyle" (1878). On the latter the painter has apparently set the seal of his approval, for he has signed impressions with his name and the butterfly, in pencil.

One outcome of the continued use of mezzotinting in modern times is the employment of the medium to reproduce paintings in color, from one plate, which is carefully inked with all the colors for each impression. S. Arlent Edwards, Charles Bird, F. G. Stevenson, J. S. King and Fred Millar have practiced this specialty in our day.

In other days, color was particularly used for the figure pieces after Morland and others. Some of the plates thus printed in colors have a soft and pleasing effect, though not a few are weak in conception and execution. Sometimes, too, color was employed to mask the waning beauty of a worn plate.

It was in the spirit of the later nineteenth century to essay the production of original work in mezzotint, to try it as an autographic art. This was an attitude toward the art rarely found in the eighteenth century. Frye is almost an isolated instance. If Mc-Ardell or Smith or Dunkarton mezzotinted portraits or figure pieces from their own designs, it is almost the same as if they copied paintings by others. In fact, the results are often not as good. At all events, they copied, even though it was their own work.

The first noteworthy painter-mezzotinter was J. M. W. Turner, in those plates of the "Liber" which he scraped himself. Much later, near the end of the century, Joseph Knight was engraving landscapes with quiet effectiveness. One I remember, a simple bit of

flat land, with clouds rolling upward above, and taking up most of the picture. I do not mention this so much for its merit, although it is a good, honest piece of mezzotint, but because it illustrates modern appreciation of landscape for its own sake, the feeling voiced by Amiel in the words, "a landscape is a condition of the soul." More perfectly is this expressed in plates by Haden and Short, of whom more mention later on.

In these later days the spirit of experimenting in expression has led various interesting artistic personalities to essay mezzotinting, and that, too, with a return to purity of method. One of them is Hubert Herkomer, whose "Etching and Mezzotint Engraving" (1892) is an interesting volume on the modern technique of the art.

Sir Seymour Haden's work includes several mezzotints, some heavily etched, "Egham Lock," "Winchester Canal," "Harlech" and "Breaking Up of the Agamemnon," a moonlight scene, the last two with fine effect of sky in gradations from tender lights to strong darks. And his well-known, large and vigorously executed etching after Turner's "Calais Pier" was also used as the basis of a mezzotint.

Some of the unpublished drawings for Turner's "Liber," such as No. 92, "View of a River from a Terrace," were mezzotinted by Frank Short, and done with skill and sympathetic appreciation of the painter's aims. In his "Mouth of the Thames," after Turner, with a somewhat coarse grain, he is particularly happy in giving the translucent effect of the waves, and his "Swiss Pass," after the same painter, is apostrophized

by Wedmore as "a silvery mezzotint of utmost delicacy, . . . a feat, indeed, a late Turner realized; a dream arrested; the evanescent made lasting."

He has also translated some landscapes by Constable and De Wint with the same rare perfection of technique, though much of his reproductive work was after the imaginative G. F. Watts, whose head of Tennyson he rendered with tact and sympathy. Delicacy in manipulation, variety and flexibility are among the qualities attributed to the work of this artist, who in original mezzotints, such as "Weary Morn" and "Lifting Cloud," has established his prominent position among those who have striven to make mezzotint a vehicle for a direct expression of artistic individuality, an immediate record of impressions. An interesting portrait of Haden is the work of Aphonse Legros.

In Germany, Max Pietschmann has scraped at least one head, if not more, with a free touch and in a modern spirit, and the same terms may be used to characterize an interesting bit of wooded landscape, "Licht und Schatten," by Fritz Voellmy of Basle, published in the Zeitschrift für Bildende Kunst in 1904. Otto Protzen has produced some very interesting marines, full of life and movement.

The veteran American engraver, James D. Smillie, an artist well grounded in the technical details of the various methods of engraving on copper, did a mezzotint, "Hollyhocks," of quiet charm.

In view of the fact that mezzotint is a fairly rapid process, as compared with the arduous toil of line engraving, it is not entirely beyond the range of possibility that more may in time adopt it, as some have turned to etching and a very few to lithography. It will, however, be limited to certain subjects, certain artistic moods. For giving masses of light and shade. it affords a finished appearance while wanting the detail and precision of line. It lacks the suppleness, the immense possibilities of variety, of the etching or the lithograph. But in its turn it has qualities of beauty and loveliness which neither of these arts can attain: a quite peculiar depth of velvety softness which the darkest, richest tints of the drawing on stone do not yield; a sufficiency of effect in rendering the finish of certain textures in portraits, and a peculiar richness and luminosity in certain aspects of landscape. So we come back again to the fundamental truth that each art has its field, that it fills the same and should not be expected or forced to do the work of another art, that its beauty and charm lie in the honest and truthful expression of its own nature, and that we must take it as it is, advantages, drawbacks and all.

CHAPTER V

AQUATINT AND OTHER TINT METHODS

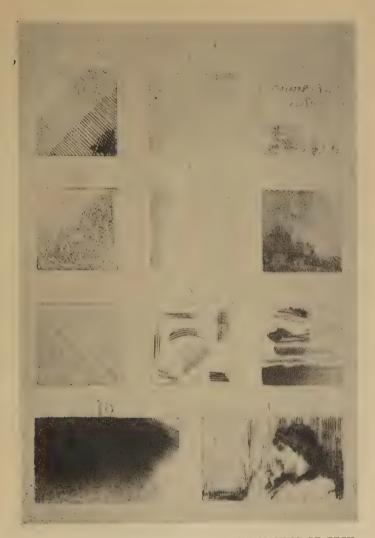
THE desire to present tones and not lines only has led to various devices for printing tints.

I have shown in the chapter on etching that the simple leaving of a film of ink has been employed to cast a tint over the etched line, and that intentionally produced foul biting is occasionally indulged in for the sake of the peculiar effect of its grain.

The monotype is produced by painting in ink or colors on a metal plate and passing the latter through the press before the color is dry.¹

Many means have been used to roughen the surface of the copper in order to form projections and consequent hollows to hold ink and thus produce tints. Plate three in Frank Short's little book "On the Making of Etchings" shows specimens of work in some of these processes—sand grain, aquatint, sulphur-tint, rouletting, mezzotint and dry-point. Some engravers have roughened the plate with a file. Another plan is to corrode its surface with powdered sulphur, producing the "sulphur-tint." Mrs. M. N. Moran employed "Scotch stone" (a substance used to reduce plates) in *Twilight*, *Easthampton*. And there are other means at hand. Vinegar acts as a weak mor-

¹ There is a fine collection of monotypes, for example, in the Bibliothèque d'Archéologie, Paris, those by Degas being remarkably rich in suggestion.



A PLATE FROM FRANK SHORT'S "ON THE MAKING OF ETCH-INGS" (LONDON, 1888).

Fig. 1. Etched lines bitten in different depths. 2. Etched lines burnished at lower corner. 3. Soft-ground etching. 4. Sand grains. 5. Foul biting. 6. Aquatint. 7. Sulphur-tint. 8. Lines cut with a burin. 9. Roulette work. 10. Mezzotint. 11. Dry-point,



Elching and aquatint by Francisco Goya y Lucientes.

Goya's application of aquatint tones is individual, vigorous yet subtle, graded to the mood of each plate.

dant, and rain-water etches zinc. The bare copper can be brushed with acid, which, biting lightly, produces slight irregularities. The aim of this procedure is more regularly and controllably attained by the use of aquatint (see pp. 131 et seq.). This latter served from the first to imitate wash drawings, and hence was known in France as gravure au lavis.

The sandpaper method is a simple substitute for mezzotint; the grounded plate is passed through the press with sandpaper laid face downward upon it. By this operation the grains of sand are forced through the etching ground onto the plate. The latter is then subjected to the action of acid, which attacks the copper wherever it has thus been laid bare by the grains of sand. As an auxiliary it is occasionally employed, but not often as a pure medium of expression. Pennell and Strang have given examples of pure "sandpaper mezzotint." Grains of fine sand may also be dusted on the plate, a method carried out also with marine salt. The plate is covered with an etching ground on which the salt settles and sinks down upon the copper. The salt is then dissolved, leaving little openings in the etching ground, at the bottom of which the plate lies bare. Here again, successive acid bitings produce the desired result.

All these, being very limited and special in their effect, are auxiliary processes. That is, they are rarely employed alone, but usually, and to a slight extent, in conjunction with other methods, especially etching.

The best-known of the various minor methods of producing a grained tint is that known as aquatint. And that, though often and perforce used in combina-

tion with the etched line, enters so largely into the work that prints thus produced are known as

aquatints.

Aquatint is really an etching process. Minute particles of a resinous substance are deposited on a copper plate. The latter is then placed in a bath of acid, which eats into the copper wherever it is not protected by the resinous particles. These latter can be applied in two ways. A fine powder is allowed to settle on the plate inside of a box in which it has been stirred up and thrown into the air by a special contrivance. The quantity of powder may be regulated by taking the plate out, covering with paper the portions which have been sufficiently powdered, and then replacing it in the box. Or the particles are held in suspension in alcohol which is poured over the plate. As this coating dries, it crackles, leaving little fissures. The treatment with acid is the same in either case.

The resin is then removed, and the plate is ready for the press. The acid having entered into the fine fissures between the particles, the result in printing is a flat tint with minute white spots, giving a sort of crackled effect on close inspection. Stopping out is resorted to, as in etching. That is, portions that are to appear lighter are covered with stopping-out varnish after the plate has been subjected to the action of the acid for a certain time; then the plate is placed in the acid bath again. This of course can be repeated, the darkest portions being thus exposed longest to the acid.

The process, as I have described it, is the one used in later times. By the method as originally invented

or perfected by Jean Baptiste Le Prince (1733-81), the plate was first covered with an etching ground and the latter then removed by dissolution except at the places which were to appear white in the impression. The unprotected portions of the plate were then dusted over with finely powdered asphaltum or resin, after which the plate was bitten and stopped out as already described.

Aquatint can render flat tints varying in strength, from the most delicate to quite dark, but not the velvety richness of mezzotint nor its gradations. An absolutely gradual, delicate merging of a dark tone into a light one is hardly within the power and province of pure aquatint, and is not met with in the older plates. The line of demarcation between two tints of different strength is of necessity always visible.

Aquatint is an art limited in its resources and its expression, but it is a pleasing art within its limits, with a liquid, translucent effect. Its more or less sharply outlined flat tints (which may occasionally recall faintly, in miniature, the effect of wings or set pieces in stage scenery) made it especially suited to the delineation of buildings and street views. For this purpose it was much used, especially in England; the colored plates in the "Microcosm of London," on which Rowlandson and Pugin co-operated, the former drawing the figures, the latter the buildings, being a noteworthy example of this class of work. In the second volume of this book, in "Foundling Hospital: the Chapel," the wall at the left under the gallery illustrates in a simple way the nearest approach to

gradation by stopping-out; a flat tint of color applied by hand does the rest. The hand coloring is also responsible for much of the light effect in the "Watch-House" (Vol. II.), while "Fire in London," with its possibilities of lurid contrast of flames and the blackness of night, is flat and shows the weakness of aquatint as then applied.

In the plates published in England during about 1790-1830, most of them as illustrations in books, the use of color was largely depended upon to give effect. Washes of water-color added tenderness to the picture, toned down the aquatint grain and bridged over the sometimes harsh transition from dark to light. In a word, they brought harmony into the whole. J. M. W. Turner and Thomas Girtin both spent some time as boy apprentices in laying even washes on aquatints for publishers such as Melton and Dayes.¹

Aquatint itself has a certain resemblance to water-color or sepia washes. This was probably felt by its supposed inventor, Le Prince, who employed it to reproduce in facsimile some wash drawings made by him during a journey in Russia. For several decades it served in England as the special medium for the illustration of books of travel, in which field it eventually gave way to lithography.

The culture of the picturesque is pursued in William Gilpin's "Three Essays: on Picturesque Beauty, on Picturesque Travel and on Sketching Landscapes," as also in his "Observations on the River Wye" and other similar works by him on the picturesque in other parts of Great Britain. In these, and in other books, such as J. Hassell's "Tour of the Isle of Wight," the

¹ For a record of English book-illustration by this medium, see "Aquatint Engraving" (1910), by S. T. Prideaux.

aquatints are printed in black, with a tint of vellow or brown washed over the whole by hand. "Tours." said Combe. "are a fashionable article in the literature of the present day." Richard Ayton's "Voyage Round Great Britain" (8 vols., 1814-25), illustrated with several hundred plates by William Daniell, is typical of the very best that was produced in aquatints for such books of travel. The plates are all colored by hand in washes of quiet tints, mingling with the aquatint into one effect, so that in the more delicate portions of the plate only close scrutiny will disclose the part played by each. Particularly is this true of the skies, which are handled with remarkable cleverness. The tender fleeciness of cloud in "The Reculvers" or "Dover, from Shakespeare's Cliff" (both in Vol. VII.); the frequent stretches of placid reflecting water, the rushing swells and whirling spray of "Kinnaird Head, Aberdeenshire" (Vol. VI.); the clean, neat, toy-house view of "Edinburgh from the Calton Hill" (Vol. VI.); and the plate following it, with sun-streaked cloud, "Edinburgh, with Part of the North Bridge and Castle," are object-lessons, picked at random, almost, in the art of getting the most out of a combination of a mechanical ground, variegated by stopping-out, and washes of water-color. They seem to mark the limit of attainment.

To these works on picturesque natural beauties and architectural antiquities, there are to be added also many dealing more directly with the life, manners and dress of various peoples. Such are the quarto volumes on costumes in Early Britain, Austria, Russia, China, Turkey and other lands, which will not be

wanting to-day in any good collection of books on costume. And there were publications on field sports, a subject dear to the British heart. Some of these were illustrated by Henry Alken, whose work is much sought after by lovers of sporting prints. But the use of etching alone in combination with hand-coloring often takes the place of the aquatint plate. Cheapness and expedition may have had something to do with this. Separate sporting prints were numerous; coaching scenes after James Pollard, by various engravers, among them C. Rosenberg, who also engraved the "Burial of Tom Moody" (1831) after John Clark. A mere mention must suffice here.

Some publishers, such as Ackermann, kept a large staff of engravers and colorists busy. Martin Hardie, in his interesting volume on "English Colored Books," describes the making of a print from a drawing by Rowlandson. That facile artist would etch his outlines on copper. On an impression taken from this he added modeling and shadows in India ink washes. These tints were then transferred to the plate by means of aquatint by the engravers. And on a proof of this etched and aquatinted plate the artist completed the drawing in light washes of color, thus making a copy for the trained colorists.

One of the best-known series of George Cruikshank's earlier illustrations, that executed by his brother and himself for Pierce Egan's "Life in London," was also in aquatint, colored by hand. Thackeray has recorded the delight which these facile, dashing drawings gave him when a boy, how he reveled in the doings and amusements of those two men about 1 The literature of sporting prints includes books by W. A. Baillie-Grohman (1913), Ralph Nevil (1923), Frank Silzer (1925) and others.

town—"sports," in the language of to-day—Tom and Jerry. J. Malton, W. and T. Daniell, D. Havell, J. C. Stadler, J. Bluck, T. Sutherland and J. Hill are among the engravers of the aquatint plates in the numerous volumes here merely hinted at. Martin Hardie has with great industry gathered long lists of these books, with interesting comments.

One of the British artists of this school of the handcolored aquatint, John Hill, came to the United States, where, among other plates, he did the "Hudson River Portfolio" and similar large landscapes after paintings by W. G. Wall and Joshua Shaw. This is honest work, not of the highest type, but as good as much of the English work of the time and better than a very great deal of it. It will, however, and with reason, be always valued more particularly for its subject interest. A number of views have come down to us in which the appearance of certain places, especially in the Middle. Eastern and Southern States, is preserved. W. J. Bennett signed, among others, a picture of "South Street, from Maiden Lane," New York City, about 1834, in which he has held the aspect of the water front when sailing-vessels in long rows thrust their bowsprits far over the street. A similar documentary importance attaches to his two large views of the great fire in New York City in 1835, engraved after paintings by N. Calyo, a scenic artist.

Earlier in the century, the famous series of over seven hundred portraits drawn from life by Fevret de St. Memin was engraved by him in etching, aquatint and roulette.

He to whom complete color effect appeals will find

most satisfaction in the remarkable color-printing shown in French productions. In these a plate was used for each color, the result being harmonious and pleasing in its softness and delicacy. The aquatint ground fairly disappears under the colors; harshness of tint outlines is covered; all is graceful and suave.

Coqueret, Levachez, Descourtis, Sergent, Guyot, Janinet and Debucourt, in the last two decades of the eighteenth century, were enveloping with the charm of color the coquettish and seductive figures of their day, exhibiting the vein of Greuze and his "Broken Jug," the sentimentality of rural idyls of the "Annette and Lubin" sort, the stagy bucolics of such plates as "L'Amour surpris," by Descourtis, after Schall, or the direct theatricals of Janinet's clever portrait of Madame Dugazon as "Nina" in "La Folle par Amour." P. M. Alix, an able and diligent craftsman, is known to collectors of Americana by his portrait of Franklin with thick-rimmed eye-glasses, after "Van Loo."

Janinet (1752-1813) first successfully applied Le Prince's discovery to color-printing, which he improved by his inventiveness, and in which he displayed versatility and resourcefulness, rendering quite different styles and subjects, after Boucher and others, with sympathy and skill. His portrait of Marie Antoinette, in a border printed in gold and color, is cited as a brilliant specimen of his work.

One of the best-known names in the annals of color-printing is that of P. L. Debucourt, a master of technique. He brought the processes employed by his predecessors to a high degree of perfection. In

his spirited drawings, of which the "Promenade in the Gallery of the Palais Royal" and the "Menuet de la Mariée" are especially often cited, the life of the beau-monde and of the bourgeoisie is reflected with some indiscretions as to toilette, and in a chaffing vein. Bouchot and Fénaille each devoted a quarto volume to this artist, "the historiographic designer of Paris." The Goncourts praise his work in most enthusiastic terms, and lay special stress upon his suppression of the flat and cold mechanical grain, concealing the process, the manner, the labor which has produced the effect, and which, by the way, comprised various other aids beside aquatint. There was roulette, for instance, as may be seen in the flesh portions of "Les Amateurs de Plafonds au Salon" after Carle Vernet. "The scenes which he throws onto the copper," say they, "have the lightness of the brush." "Barrière des Champs-Elysées" is quite remarkable in its feeling of snowy weather, and delicate and restrained in color. But his best period unfortunately ended before 1800. and was followed by utterly poor work, often colored by hand.1

Vidal and J. B. Morret are others among those who did color plates of this kind, the *estampe galante* being much in evidence. Much of the coloring appears today in bluish tints, with a tapestry-like effect.

It was a period of various newly discovered processes; combinations of etching, aquatint, roulette and other methods were employed. Hence there has arisen some confusion of terms. "Lavis," for instance, is applied also to work in which there is much rouletting, more often, perhaps, than to "wash etching."

^{*}Reproductions of French color prints may be seen in "French Colourprints of the XVIII Century; An Introductory Essay by M. C. Salaman" (1913).

Jazet marks a decline in this art of color-printing, as may be seen in his "L'Accordée de Village," after Greuze, or his smooth "La Vie d'un Gentilhomme en toutes Saisons," after Montpezat, about 1830, partly printed in color, partly colored by hand. His black-and-white plates after Wilkie's "Le Lapin sur le Mur" (with rouletting) and John Burnet's "La Leçon de Guimbarde," "Le petit Oiseau" and "Les Joueurs de Dames" are examples of the not very frequent use of the medium to reproduce paintings. They recall the use of aquatint for the distant mountains and the sky in a stipple engraving of Lorraine's "Midday" by I. H. Wright ("British Gallery of Pictures"), producing a softness of aërial effect which the stipple method alone could not give.

J. T. Prestel, a German, worked up a method of his own, by which he produced a number of plates, as did also his wife, Marie Catherine. Among the latter's reproductions of drawings, similar to the "chiaroscuro" prints described in the chapter on wood engraving, there is a rather striking plate representing a woman in conflict with a man crouching over a dragon. The outlines are heavily etched, and an aquatint grain indicates shadows and holds a brown tint spread over the whole, while hatchings printed in gold indicate the high lights.

One of the most noted of English engravers of landscape in aquatint was F. C. Lewis. His "Bridge and Goats" is the one plate of J. M. W. Turner's "Liber Studiorum" executed entirely in this manner, the framework only being etched, and therefore offers a particularly good opportunity for comparing aqua-

tint and mezzotint as used on similar subjects. This print shows some of the finest effects possible in aquatint, delicacy especially. It shows also that flatness which has always made aquatint better for tones than for textures, more effective in unchanging surfaces than in gradations, more useful in combination with other methods than alone.

It is worthy of note that aquatint was used to gain tenderness for the sky in several of the plates of the "Liber," the rest of the plate being, of course, in mezzotint. Such are "Dunstanborough Castle," with the morning light breaking on the right; "The Bridge in Middle Distance," "Hindoo Worshipper" and "Junction of Severn and Wye," in which latter an intensity of light is obtained in the lower part of the sky by practically white paper.

Some of Turner's drawings were reproduced in aquatint at a much later date by Brunet-Debaines, partly as illustrations for Hamerton's "Life of Turner"; and with quite the Turner touch, particularly in "Agrippina Landing with the Ashes of Germanicus."

Lewis reproduced the "Liber Studiorum" of Claude Lorraine in aquatint (1840), and in this volume is well shown the *forte* of aquatint in rendering the splashes, strokes and dabs of wash drawings. This work is of a kind different from that exemplified in the numerous books published by Ackermann, Boydell and others, to which I have referred. It is the more or less pure application of aquatint, without the pleasing and considerable aid of hand-coloring, which served well to cover up weaknesses and to smooth over

abrupt transitions. Lewis's work brings us closer to the conception of "painter-aquatints."

The term "painter-aquatints" has a rather unusual sound, but the process has served as a means of producing original work, as an autographic art; often, too, as an auxiliary. It was used by Jacque and Buhot, artists who were entirely dissimilar in style, but both ever ready to use various expedients for re-enforcing the etched line. Bracquemond, too, master of processes, used it on his etching, "Chemin des Coutures, à Sèvres." Fortuny also, "with diabolical cleverness."

Goya used aquatint in a quite original, personal manner to gain broad and strong effects in his famous "Caprichos." And similar flat tints are applied by Manet in his "Fleur exotique" and "Lola de Valence." Delacroix executed a "Smith" with a vigorous and striking contrast of black shadows with the white-hot iron on the anvil.

In work such as this and the Brunet-Debaines plates already mentioned, there is struck a note of vigorous novelty, which has become further developed in later years.

The Germans of to-day, ready to try all sorts of processes in their eagerness for means to express originality, have applied aquatint with effectiveness. Alois Kolb did a portrait of Beethoven in that medium, and it was used also for Fritz Hegenbart's "Art and Mammon," that weird picture of a woman floating erect and barely holding her head above water, while below a hideous octopus, tentacles twined around her body, is seeking to drag her down. Oskar Graf makes an energetic, free use of the process in his "Prayer"

before the Battle '; and in his virile "In the Bavarian Moorlands." Suppantschitsch ("Holy Grove"), Max Klinger, Otto Fischer, E. Einschlag and Hermine Laukota ("Regenschauer") have also employed the process in combination with etching. The Englishman, Frank Short, has produced original aquatints, "Span of Old Battersea Bridge" and "Curfew" being especially noteworthy.

Individual forms of expression are salient likewise in France, in plates such as the one by V. Prouvé, published in *L'Estampe Originale* for 1893, or in Auguste Sezanne's "Springtime." Aquatint also serves much as a vehicle for color in French etchings, as may be seen in the more recent work of F. T. Luigini, Henri Jourdain, G. de Latenay, Ch. Houdard and Manuel Robbe.

Some very creditable performances by American artists are also to be noted. Miss Mary Cassatt laid a grain to print flat tints of color on a series of etchings of women and children, Japanese in effect and remarkable in observation of subtly expressed characteristics.

C. F. W. Mielatz chose aquatint, with occasionally a touch of roulette, for effectively reproducing a set of views of New York City on blue china for the Society of Iconophiles; the series is appropriately printed in blue ink. Of his original work in this medium, one of the most noteworthy plates is a recent one, a sea-shore view, printed in two tints in one inking (à la poupée again), bluish green above and yellowish below, the two meeting in the center. There is some scraping in this plate, and, indeed, much of

the modern work shows various manipulations to add the effectiveness of delicate gradations.

By James D. Smillie, I have seen a charming little "Morning," quite free in treatment, cleverly managed in a semblance of gradation. And John Henry Hill, grandson of the John referred to, shows in his etching of Niagara how delicately the aquatint ground may be applied. Helen Hyde laid the ground for at least one of her Japanese subjects, and Vaughan Trowbridge has used it interestingly in color plates. Joseph Pennell used the process, and John T. Arms. A. B. Davies, ever an experimenter in media, used it with rare distinction of style. This little group of Americans illustrates range and possibilities. So we find varieties of expression through differences in national feeling and local environment.

It is in some of the modern work that the process is used with a freedom and vigor as seldom before, with a virtuosity in handling that is taking us beyond the flat tints of other days. The inquiring, experimentative spirit of modernity is forcing new effects from this simple ground of resin. In the exercise of even this art of limited resources and little flexibility, individual talent and originality have found a variety in expression that can be appreciated in its totality only by taking in the work of various men and lands. Forced by its very nature into a secondary rôle, an adjunct to the etched line, or a mechanical means for printing color, aquatint has been raised by a few modern men to the dignity of a distinct artistic language.

CHAPTER VI

STIPPLE AND OTHER "DOT" METHODS

ALL the methods of reproduction which have been considered thus far were based on the use of the line, or of granulated surfaces, to produce tints. But there are some which get their effects by the use of dots. This principle was applied in the early days of engraving, perhaps in order to gain a certain translucency of shadow, in the so-called "dotted prints" (Schrotblätter, manière criblée) in which white dots show against a black background. Not a little has been written about these queer and interesting products of art in the fifteenth century. The late S. R. Koehler, of Boston, concluded that they were executed with the graver and sometimes with punches, in relief—not intaglio; on metal plates—not wood blocks.

From those days to the present, the application of dotting is found, in various forms of reproductive art, down to its survival in commercial lithographs and zinc process etching. Punching, opus mallei, or work of the hammer, was done by driving steel punches of various kinds into the plate by striking them with a small hammer or mallet.

Dotting or stippling was intermingled in the work of the earliest line engravers, and, as their art developed, this dot effect is seen in short strokes of the graver within the "lozenges" formed by intersecting lines, or in the succession of short dashes in which a line is made to die out, used in flesh tints. But stippling as an art in itself, forming the principal portion of an engraving, began with the so-called "crayon" or "chalk" manner, which developed into stipple engraving proper.

The last years of the eighteenth century were a period of newly discovered processes. Reproductions of drawings by old and modern masters came into vogue. This interest in drawings was in itself a sign of healthy taste. For an artist's drawings and sketches not only disclose much of his method and theory, but, being usually executed without reference to the public, they are apt to offer a more intimate view of his artistic personality than the more finished products of his art. And to-day, when phototypy (Lichtdruck. collotype) renders such drawings in absolute facsimile, the treasures widely scattered in European museums are brought together in close facsimiles, preserving all the essentials of the originals. Reproductions of drawings by old masters in the Albertina, the Amsterdam Staats Museum, the British Museum, the Berlin Print Room, the Venice and other collections have been issued, while other works are devoted to drawings by individual artists; those by Rembrandt, for example, being represented by 450 plates. The material thus collected offers invaluable opportunities to the students of art and of art history.

But in those eighteenth-century days the reproductions of drawings had to be engraved by hand, and inventiveness was stimulated. Wash drawings in Indian ink or sepia were reproduced in aquatint. Brush drawings on tinted paper, with the high lights in white, were rendered in "chiaroscuro," which will be described in the chapter on wood engraving. A similar effect was produced on metal for some of the reproductions of drawings by old masters in "A Collection of Prints in Imitation of Drawings" (1778, 2 volumes), in which etched, stippled and mezzotinted plates appear. Line was used in some of Bartolozzi's engravings after Guercino. Wide pen-strokes were simulated by the aid of the échoppe, a sort of thick etching needle, not pointed, but cut off obliquely at the end.

In red chalk or crayon drawings on grained paper the line is not continuous, but is interrupted by the grain of the paper, an effect that can be easily verified by looking at any art student's charcoal studies. The desire to imitate this broken line evidently led to the invention of what is known as the chalk or crayon manner, which was so well adapted for this, as well as its outgrowth, stipple.

Stipple engraving served this purpose notably in Bartolozzi's "Imitations from Original Drawings by Hans Holbein." If these portraits of persons of the court of Henry VIII. are placed beside the collotype color reproductions issued in Germany (now in Switzerland) and partly in England, it becomes evident that, with their impertinent intrusion of unwarranted detail, they are quite impossible.

In the crayon manner, the plate, after being provided with an etching ground, is worked with roulettes of various forms, which pierce the ground, so that the plate may be etched. The mattoir is another imple-

ment for this purpose, a sort of punch with a roughened under surface like a rasp or file. Drawing with these on an etching ground produces lines that are made up of irregular dots, and the result in printing is surprisingly like crayon lines, the effect being a trifle coarser than in soft-ground etching. To this latter process, the crayon method, in its purpose and its effects, is akin and both have some resemblance to lithographs.

"It was the celebrated amateur Comte de Caylus," says Julia Frankau, "who first suggested printing these engravings in the colors of the original drawings from one plate."

Both J. C. François and Gilles Demarteau are prominently identified with the art. Various combinations of etching, aquatint, crayon and stipple were made, processes and tools and appliances were mingled, even wood-blocks being occasionally used for broad tints and to give tone, so that it is not always easy to unravel the complication and exactly define the process by which a particular print was produced. That is apparent when looking at the color prints of Ploos van Amstel or Debucourt. François, who produced admirable copies of chalk drawings, executed a portrait in every possible method. Demarteau, who used a roulette of his own contrivance, is said to have rendered Boucher's drawing in sanguine (red chalk) to deception. From this process the English developed stipple engraving, in which the dots are much finer and closer. This is really a refinement and perfection of the crayon manner, fitting it to reproduce other work beside drawings.



THE HONOURABLE MISS BINGHAM. Stipple engraving by F. Bartolozzi (1786). After a painting by Sir Joshua Reynolds.



ONE OF THE HUNDRED VIEWS OF FUJIYAMA.

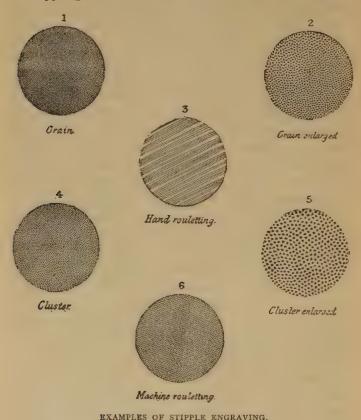
By Hokusai.

(C. S. Smith collection, New York Public Library.)

In stippling the plate is covered in the usual manner with an etching ground, to which the outline of the proposed design can be transferred from a pencil drawing on paper by laying the drawing, face downward, on the ground, and passing plate and paper through a press. The design is then executed on the ground, as in etching, with a point, the dots being coarser and farther apart, or finer and closer together, according to the strength and darkness, or the delicacy and light, which the artist wishes to produce. The plate is then bitten, stopped-out with Brunswick black where desired, and re-bitten, as in etching, and can then be finished on the bare copper, scraper and burnisher also being used for removing burr or reducing work.

That is the process in its simplest form, but in this case, too, methods are often so mingled, various tools so used in combination, that it seems best in most cases to enjoy a fine stipple-effect without making inquiry into the manner of its production. A. W. Tuer, in his work on Bartolozzi, speaks of the ingenious devices resulting from the necessity of keeping up with increased demand. "Complicated toothed wheels or roulettes were invented," says he, "containing two, three, four or even half a dozen roulettes on one axis, and these were made with teeth of various sizes and at various distances apart. It is stated that no less than forty of these complicated tools were at one time known and more or less used." A plate in Tuer's book illustrates some of the grains produced in stipple, that of the time of Bartolozzi and that of the nineteenth century, as well as the effect of hand-rouletting and the craquelé or egg-shell appearance of machine rouletting.

Almost every engraver adopted a manner of his own in stippling. Then, too, there were certain recognized



From "Bartolozzi and His Works," by A. W. Tuer, Vol. I.

styles. It is rather amusing to go over the records of these little formalities and find that there were groupings of dots known as the "cocked hat," others called the "butterfly's wing," and still others referred

to as "Agar's grain" or the "lemon grain." The last brings us closer in point of time to what one writer calls the painful "small-poxy" style of modern stipple engravings. The older engravers applied the dots with a free touch, a looseness which has much to do with the charm of stipple, and at the same time lies at the bottom of its weakness. In the modern work, that of the Holls, for example, the dots are set down by the graver in formal clusters, with neatness, firmness and regularity, and with a coldness and severity that was apparently believed suitable for the imitation of statuary. Certainly it was used for that purpose very frequently in the old days of the London Art Journal. But surely the appearance of marble was given better in that print after Chantrey's statue of Washington, by James Thomson, perhaps the last engraver to work in the older, grained style.

Stipple could be executed with great celerity and could be easily learned. Sir Robert Strange, the noted line engraver, is said to have expressed his regret at the extreme facility with which it was executed, so that it "got into the hands of every boy." He might have said "girl" as well, for Angelica Kauffmann's "Nymphs Awakening Cupid" was "ingraved by Rose Le Noir, aged 14 years, 1782." This ease of execution undoubtedly is responsible for much of the weak work in the medium.

Stipple lacks the cohesion and firmness of line. The step from pure stipple to the addition of line, etched or graven, was therefore soon made, and in time the process became itself mainly a component part of methods known as mixed, being used particularly to

give softness to faces in portraits done with the burin. But such strongly mixed methods have generally been the concomitants of deterioration. Weakness and commercialism, seeking for quickly and easily gained effects, have mingled methods with easy facility, producing plates of superficially pleasing aspect. This was especially so during the first four or five decades of the nineteenth century.

Stipple, seen at its best, represents a quite special expression of the art of a special period, and answers to a quite special taste. A suitably selected and framed print by Bartolozzi will make a harmonious and quietly effective decoration for the wall of a room furnished and decorated in a light and graceful style, based on or similar to that of the period to which the print belongs. Stipple engraving, like mezzotint, is the outcome of the period in which it particularly flourished, and in its finest expression it practically ended with that period. Like mezzotint, also, it has become identified with England, so that it has sometimes been referred to on the Continent as la manière anglaise. Introduced by W. W. Ryland from France into England, the art attained an extraordinary popularity there in the second half of the eighteenth century.

The name of Francesco Bartolozzi has become almost synonymous with stipple engraving in England. Practicing the art at the time of its greatest vogue, he made it peculiarly his own. In the paintings of Angelica Kauffmann and Cipriani he found subjects which, in their sentimental sweetness, insipid effeminacy and sometimes weak modeling, lent themselves remarkably well to reproduction in this manner of

engraving. This was because they did not strain the quite limited resources of the medium. One of the best of Bartolozzi's engravings after Kauffmann—best also in the original design—is the "Toilet of Venus." Where interest leads on in this field, one may find more to note. Another Kauffmann stipple, printed in color, by I. M. Delattre (1783), representing three affable young women in undulating drapery pretending to be allegorical conceptions, throws light on the tastes of the time by its very title: "Beauty Directed by Prudence Rejects with Scorn the Solicitations of Folly."

Looking over some Bartolozzis again, not very long since, I found four after Reynolds especially characteristic of the method and its possibilities. In "The Girl and the Kitten," the soft reflected light on the face is noteworthy; in "The Countess Spencer" there is an attempt at texture, and stippled lines shade the band of the hat and indicate the stripes of the dress: there is much of such line work in the dark portions of coats and trees, and on the stones, in "The Affectionate Brothers"; and "The Honourable Miss Bingham," effectively printed in warm brown ink, shows that a portrait with no accessories is perhaps best suited to stipple. This last, with a little help from lines on hat and background, is quite strong, and as good a stipple portrait as can be found. There is strength, too, in the same engraver's "A St. Giles's Beauty," after J. H. Benwell, a companion piece to "A St. James's Beauty." His portraits of Elizabeth Farren. the actress, after Lawrence,—good in textures,—the Earl of Mansfield, Lord Loughborough, and Lord

Thurlow, may also be noted. But choice might go on, for he has a number of meritorious plates to his credit. And he did a tremendous amount of work, over 2,000 pieces. Among his ablest pupils were L. Schiavonetti (whose unfinished engraving of Thomas Stothard's "Canterbury Pilgrims" is well known), P. W. Tomkins, William Nutter, Henry Meyer, Delattre, J. K. Sherwin and Caroline Watson.

Where stipple invites comparison with mezzotint or line engraving in the efforts to attain a completeness of effect beyond the light tones with which it is so apt to be associated in our minds, it finds one of its most prominent exponents in Caroline Watson; unexcelled, I feel tempted to say, for one cannot conceive the medium capable of greater distinction of style or variety of treatment than in Reynolds's portrait of Sir James Harris as she has rendered it. Stipple cannot go further in smooth delicacy of modeling than in the face of this portrait, and while the richness of mezzotint is ever denied it, it can hardly approach closer to that art of succulent shadows than it does in such a case as this.

Similar qualities appear also in her portrait of "Sarah, Countess of Kinoull," after Sam. Shelley, which also has the grand air of the mezzotint. While noted for the microscopic delicacy of her rendering of the miniature portraits of Cosway and others—as may be seen in "Lieut. Gen. Sir Robert Boyd," after J. Smart (1785)—she also can simulate broad brushwork in her little "Bacchant" after Rubens.

J. K. Sherwin manages to approach the effect of mezzotint in the face of his "Roxalana" after Revn-

olds. The famous and popular "Angels' Heads" (portraits of Frances Isabella Ker Gordon) by Revnolds, has been held in a tender and lovely engraving by Peter Simon. The same Simon's two large scenes from Shakespeare's "Much Ado About Nothing" (Act III, Scene I) and "Merry Wives of Windsor" (Act III, Scene III), from the Boydell Gallery, are quite remarkable efforts. The lace apron of one of the women in the "Merry Wives" scene is a marvel to be found in stipple. I have seen impressions of these two plates in colors, done in one printing, as effective as anything may be in this manner. And there are two famous plates, companion pieces, by F. D. Soiron after Morland, "St. James's Park" and "A Tea Garden," which, in unexceptional impressions. printed in colors, are expressions of stipple at its best, and an everlasting delight to the lovers of the art.

Soiron's "Promenade in St. James' Park" after Edward Dayes, and "An Evening in Hyde Park," heavily etched in the trees, are interesting attempts to render in stipple the things which are not stipple's, but a bit wooden in the figures and faces, although they do show vigor and variety, with the aid of heavy etching in the trees and other expedients and manipulations of dotted effects.

Several of the mezzotinters of the day followed the popular taste and adapted themselves to this art, so different in feeling from their own, and with some noteworthy results. Earlom was one of them. Another was John Jones, who used etched lines in the dark shadows of hat and chair, and stippled lines in the shawl and background of his portrait of Lady

Hamilton ("Emma") after Romney; and whose "Muscipula," after Reynolds, shows qualities of style similar to those found in his mezzotints, particularly a touch of rigidity, a slight suggestion of woodenness, resulting from a sweep that sometimes omits pliant deviation to note the slighter variations in form.

John Raphael Smith also was very active, especially in the production of fancy subjects, usually in color. These large-hatted, be-sashed beauties file before our gaze in a long array, simpering, smirking, alluring. mock-serious, and often expressionless to the verge of inanity, but usually with a certain light and airy grace. Sentimental rusticity is also apparent, as in the mezzotints of the time. The very titles of these prints indicate the sentiment that inspired them: "A Snake in the Grass" after Reynolds, "An Evening Walk," the suggestive "What You Will," "The Mirror-Serena," "Flirtilla" and "Contemplating the Picture," after his own designs; and "The Tavern Door," "Rustic Employment," "Dressing for the Masquerade," "Delia in Town" and "Delia in the Country" after Morland. All of them were printed in colors, as were also Morland's graceful "Variety," and inane "Constancy," reproduced by William Ward, who likewise engraved "Thoughts on Matrimony" after J. R. Smith, and "Hesitation," from his own design. These engravers not infrequently invented and drew the conceptions which they engraved, and were thus assured of the complete sympathy of their translator. Their designs are a reflection, both in subject and treatment, of the popular art of the painters whose work they habitually reproduced.

The re-enforcing of stipple by lines is always done with discretion by these masters of the art. It is by no means a "mixed method" yet, but simply an accentuation of certain portions of the plate. Beside, even the line work is sometimes stippled; that is, the line is formed of dots placed very close together, giving an effect of freedom, of loose handling, in harmony with the special character of stipple engraving.

A very large number of portraits saw the light in the years just preceding and following the turn of the century, plates signed by H. R. Cook, Ridley, Chapman and others. Occasionally one rose above the common run, but usually in subject interest only. Now and then an example of fancy printing, brown ink or red, or even two or three colors. For such small portraits stipple is indeed well suited; they do not make too great demands.

In portraits and fancy subjects stipple found its most appropriate application, its peculiar soft qualities appearing to best advantage in lighter tones. But it has also been employed to reproduce paintings by old masters, where its weakness in expressing variety of color and texture is more apparent. The plates in Tresham and Ottley's "British Gallery of Pictures" (1808) after paintings by old masters, executed under the management of P. W. Tomkins, are a good example of this. The strong darks are a little heavy, a little colorless; one gets the impression that the art has been strained a little beyond its bounds. But one feels also that the engravers have done their best in extracting from the medium variety of expression for variety of theme.

The effect is apt to be weak and fuzzy unless the line is called to aid. In his plate after Rubens's "Woman Taken in Adultery" A. Cardon gets color and variety by much line work and by much variation in the application of the stipple. In Giorgione's "Gaston de Foix," engraved by A. Cardon, the sheen of armor is produced by heavy lines contrasting with the white paper, while the stippled texture of the cloth on the attendant's sleeve is rather weak. There is a certain energy in the head of the old man in "Lot and His Daughters," by Schiavonetti, after Guido Reni. One of the best bits of flesh modeling in the book is seen in the delicate, luminous flesh tints of R. Woodman's "Children at Play" after Rubens. Garofalo's "Vision of St. Augustine," engraved by Tomkins, is an ambitious attempt at landscape work, where pure stipple is out of place. I. H. Wright, on the other hand, in his print of Claude Lorraine's "Mid-Day," gets aërial perspective by using heavy lines in the foreground and aquatint for the distant mountains and the sky.

I have cited the plates in this book, because they illustrate certain points and because they are perhaps more easily available in large cities than separate prints of greater importance might be.

Although the art originated in France, the French as a nation evidently did not take kindly to stipple. What they produced in that medium was, as a rule, not remarkable; more often it was commonplace, and the coloring, usually by hand, was in many cases harsh. Schall's domestic scenes, reproduced in stipple and often printed in color, seem to have inspired the en-

gravers to somewhat better work. Some of Legrand's best plates in black-and-white were after Schall. But in the smaller plates, issued in some number in Paris, there is not much art. They are pervaded by the same sort of sentiments as those felt in the English prints of the time, domesticity and rural felicity, borrowed for the nonce, and somewhat out of place, not even expressed with French spirit. By this I do not wish to say, however, that the French stipple engravers kept entirely out of the field of witty frivolity. Color prints and hand-colored stipples of Bonnet ("Soins Maternels" after J. B. Huet, hard in color), of Darcis after Lavreince, of J. A. Payen or Legrand (things of the insipid kind later on executed also in lithography), of P. Augrand ("Bonjour, Maman" after Malet), of Fme. de Monchy ("Le Départ d'Adonis pour la Chasse" after Monsiau), have usually little merit but that of a certain rarity, at least in America. Their interest is principally that of all pictorial records to the student of what we may call comparative art.

But there are some exceptions to the rule, notably certain large prints, which are not only done in perhaps as pure stipple as you can expect, but which are also examples of noteworthy success in the expression of textures, usually a weak point in stipple. A satin gown is not often so well done in a stipple engraving as in "Le Bouquet Inattendu" by H. Gérard after Mlle. Gérard, élève de Fragonard, or "Le Baiser à la Dérobée," by N. F. Regnault, who engraved also Fragonard's "La Fontaine d'Amour."

The matter of mixed methods is well exemplified it.

engravings such as "Le Triomphe de Minette," after Mlle. Gérard, by Vidal, who seems to have used stipple, line, roulette, aquatint and what not on the same plate. J. de Longueil's color prints show traces of stipple, roulette and aquatint. These are instances of a mixture of methods such as the Frenchmen used also in their colored aquatints.

One is not likely to see much of the French color work in America. Nor are German color prints easy to find. One may come across a few in some private collection, perhaps some of those by Heinrich Sintzenich, who studied with Bartolozzi, issued in 1782 or '84. They will probably prove to be about on a level with the ordinary average of the smaller French color prints, but more restrained in color, and rather better in its application.

In the early days of the American Republic, Edward Savage and David Edwin did some stipple portraits. Later, toward the middle of the nineteenth century, came machine-like regularity of dotting and the mixed method, but a little earlier than that there was issued purer stipple work of a rather heavy kind, as in the "National Portrait Gallery" of 1834, and in larger plates, from which J. B. Longacre's "W. H. Harrison" stands out with refreshing virility.

If I cannot show a violent and full enthusiasm in summarizing this chapter on stipple, it is simply because the field of this art is limited. It is a significant fact that it has not served as a "painter art," as a direct form of expression for artists. The portraits by Bartolozzi and Caroline Watson, which have been

noted, show that the mellow grace, the gentle charm of indefiniteness, the delicately grained tones of this art can be utilized well without descending to the simpering prettiness or amateurish puerility which has unfortunately too often characterized its practice, and has accented a certain anæmia. They show a realization of what was best in this medium.

CHAPTER VII

WOOD ENGRAVING

THE art of the wood engraver has always been more or less close to the people, so much so that even to-day the average man will refer to a newspaper illustration (reproduced by photographic methods) as a woodcut. Cheapness no doubt had much to do with the use of the wood block as a means of expression of "art for the people."

"Its influence," says George E. Woodberry (in his "History of Wood Engraving"), "was one, and by no means the most insignificant, of the great forces which were to transform mediæval into modern life, to make the civilization of the heart and brain no longer the exclusive blessing of a few among the fortunately born, but a common blessing."

As a record of the manners and ideas of those early days it is invaluable. Certainly it remained such a means, from the time of the early block-book "Biblia pauperum," or "Bible of the Poor," abridgments of Bible history issued for the instruction of common people, until photomechanical methods late in the nineteenth century offered still greater advantages in speed, cheapness and adaptability. Even when wood engraving was almost forgotten in the eighteenth century, when line engraving in France was keeping record of

elegant gayety, and mezzotint and stipple in England were mirroring the dignity and grace of high life and the languid affectation of taste, wood engraving served for the common people, barely keeping alive in often incredibly rude form in chap-books and similar popular literature well into the nineteenth century. And when, in that century, its time came again, it was for years the main medium for the dissemination of art through the illustrated press and in books as well, not to forget its long use for school-book illustration in the United States. In fact, a history of wood engraving is practically a history of book-illustration. Its development eventually led to a craftsmanship so remarkable as to give rise to the objection that the art had been forced beyond its province. After that, it was almost entirely supplanted by the processes of the camera.

One cause of the cheapness of wood engraving as compared with engraving on copper was that it could be printed simultaneously with the letter-press. This is because it is, like typography, a relief process. Just as the body of the type rises above its base or shank, so does the engraved design on a wood block stand out in relief above the surrounding surface. The block has therefore simply to be made type-high, so that the top of the lines in relief is on the same level as the top of the types, in order that both may be locked in the same type-form and printed from at the same time. This would be impossible with metal plates in which the lines are cut in intaglio, appearing as channels instead of ridges.

The essential difference between the relief and the intaglio processes is this: In the first, everything is cut

away except what is to hold ink for printing; in the second, nothing is cut away except grooves to hold ink. By the relief method, the engraver cuts around his lines, leaving them in relief, and digging channels where white spaces are to appear in the engraving. By the intaglio method, the engraver traces his lines by digging out channels into which ink will be rubbed to show in the printing, leaving the rest of the plate untouched.

Wood engraving is an art of the line. From the beginning, and for centuries after, it was a facsimile art; it reproduced exactly a line drawing executed on the block. If the drawing was made in washes with the brush, the engraver still translated it into lines. But eventually, in the nineteenth century, the art developed into one of tones, in which the line did not have the same prominence as in the days of Dürer or Holbein. It was the "white line" which made this possible. As we have seen, in wood engraving the surface prints, not the groove cut by knife or graver. If a block untouched by the graver were inked, an impression taken from it would show a solid black. Cut a groove into this same block before inking and printing, and the result on paper will be a solid black interrupted by a white line where there was no surface to hold the ink.1 It is the adoption and adaptation of this principle of the white line which forms the foundation of the modern method of producing tones by the wood block, a method developed with especial virtuosity in the United States.

The principle of relief printing was applied long before the Europeans, early in the fifteenth century,

¹ See page 177 for more detailed account.

began to take impressions from engraved wood blocks. The Egyptians, Greeks and Romans used stamps to impress letter or marks on pottery. The Hindus are said to have known the art of printing colored designs on textiles, an art known in Europe in the Middle Ages, and which is taught in some of the public schools to-day as "block printing." And the Chinese have been credited with being the first to print pictures from wood blocks. However, the art of engraving pictures on wood for the purpose of taking impressions therefrom dates back in Europe to the beginning of the fifteenth century. A remarkably interesting review of wood engraving as a facsimile art, and at the same time, of the art of designing for this purpose, is given in the 200 plates which make up the volume entitled "Meister Holzschnitte aus vier Jahrhunderten," edited by Georg Hirth and Richard Muther (1803). Here can be followed, in convenient form, the development of the art from about 1410 to about 1850; from its first rude stammerings through the period of its fine achievement in the sixteenth century, its decline in the seventeenth, decay in the eighteenth, and finally a suggestion of the end, when this art of the pure line gave way to the art of tones and color values.

The famous old woodcut of St. Christopher bearing the Christ-child across the water, and dated 1423, is usually named as the first dated one.¹

The earliest woodcuts were separately issued, but the use of the art in book-illustration soon began. Both in the block books, in which pictures and text were cut out in relief on the same block, and in books printed with movable type. This very early work

¹ For an account of earlier, undated, woodcuts, see Paul Kristeller's "Kupferstich und Holzschnitt" (1921).

was rough and uncouth, but with all its poor drawing, ludicrous perspective and quaint stiffness it often evidenced a certain shrewd observation, a homely force in noting characteristics. In Sebastian Brandt's "Ship of Fools" these qualities are mixed with a vein of humor. In the prints illustrating the "Ars Moriendi" the most notable of the Netherlandish block books, there is notable rendition of composition, form and movement. Similar qualities mark some of the numerous separate prints of the time. At first, the woodcuts were executed in outline, in the earliest work simply a guide to the illuminator who colored them by hand. Next came indications of shadow by means of parallel lines, finally cross-hatching (lines crossing each other to mark shadow or local color) was adopted.

Cross-hatching, when executed on copper plates, where the lines are incised, offers no special difficulty. In wood engraving, on the other hand, where the lines are cut in relief, the effect can be given only by laboriously gouging out the diamond-shaped spaces between the intersections.

Cross-hatching appears first in Breydenbach's "Voyage to the Holy Land" (1486), with its clever illustrations by Erhard Reuwich of Utrecht. It was more extensively employed to obtain shadow and color values (that is, the difference of tone to indicate difference of local color and texture) in the Nuremburg "Chronicle." The illustrations in this were drawn by Michael Wolgemuth, the master of Albrecht Dürer, and by Pleydenwurff, and printed in black and white. without being afterward colored by hand, a methoa

which hitherto had evidently been considered an indispensable aid to the imagination in Germany, though not in Italy. This period of the "incunabula," or books published before 1500, is rich in illustrated works. The cuts were executed with much realism and with the customary application of local conditions to the most various events, so that the stories of the Old and New Testament, for instance, are enacted by personages who, in dress and other characteristics, are quite evidently Germans of the fifteenth century. The present interest of all this is partly antiquarian, but its importance at the time as a factor in civilization was very considerable. These prints were distinctly aimed at the people who could not read, and whose understanding would thus have to be aided by pictures.

Dürer is the first great master of wood cutting, and one of the greatest names in the records of the art at any time. With him the art came of age, so to speak. "He lifted it, a mechanic's trade, into the service of high imagination and vigorous intellect, and placed it among the fine arts." One notes in his engravings on copper a tendency to over-elaboration which is not so apparent here. There is, indeed, definiteness of statement, but it is limited in accordance with the nature of the medium. Dürer fully understood the essential difference between the limits set for the artist by copper and wood, respectively. Comparison of his engravings on metal and his woodcuts shows that clearly. With all attention to detail there is in the latter a bigness, freedom and vigor that is in accord with the character of the material used. When his work is judged in the light of his time and with ¹ See "Fine Books" (1912) and "Early Illustrated Books" (1893; 1917), both by A. W. Pollard. an open eye to the emotion, the feeling, the mental power that lie behind it all, he looms up indeed "as an embodiment of the German Renaissance." The artistic virtues in his work are positive and unmistakable. Breadth and boldness of line, appropriateness in adjustment to both the limits and possibilities of the art of facsimile wood cutting, a vigor which is comparatively seldom re-enforced by cross-hatching. It is these elements of craftsmanship, of adaptation of end to means, of artistic honesty, of supreme expression of contemporary spirit and local feeling, which long remained an inspiration to German art. His woodcuts are very numerous, and include the "Apocalypse of St. John," "Life of the Virgin," the "Small" and the "Large" "Passion," and the gorgeous "Triumphal March of the Emperor Maximilian," an exuberant display of the feudal spirit, designed partly by him but mostly by Burgkmair (1475-1529). The latter artist executed drawings for the "Weiss Kunig," a sort of poetical autobiography of Maximilian, and another poem by that romantic and picturesque emperor, "Theurdanck," was illustrated partly by Hans Schäuffelein (1490-1539), this group of artists glorifying the dying spirit of chivalry. In these works we find the development of professional illustration in Germany. These men understood the material on which they worked, and used cross-hatching with restraint. Contemporary with these artists were Lucas Cranach (1472-1553), Nicolas Manuel (1484-1530), Urs Graf, a spirited draughtsman, who sometimes introduced the refined technical nuance of putting his figures in white lines on a black ground;

Hans Baldung Grien (1475-1552), and Jost Amman (1539-1591). These men primarily drew on the wood for others to engrave their designs.

As Dürer and Burgkmaier and others, by their intelligent development of the art, helped to raise it from craftsmanship, or rather tradesmanship, the woodcutters themselves were naturally advanced in the process and began to become known, so that in time not only the designer, but the engraver as well, signed the block.

At the same time, the field of the art broadened beyond the limits of religious expression which had at first bounded it, and was devoted also to the delineation of scenes in the life of the common people. The activity of the so-called "little masters" (Altdorfer, the Behams, etc.) in this domain is spoken of more fully in the chapter on line engraving. In work such as this the spirit of the age is revealed with remarkable variety.

A great name in the annals of wood engraving, in the records of all art, is that of Hans Holbein, an artist of whom it is has been said that he was "neither German nor Italian, neither classical nor mediæval." He stands out from and above his contemporaries of the sixteenth century, "the first modern artist." He eventually became painter at the court of England, and left beside his paintings a remarkable series of characteristic portrait drawings of English men and women. As a designer for wood cutters, he produced two of the finest achievements of the art, the "Dance of Death" (1538) engraved by Hans Lützelburger, and "Figures of the Bible." His realism is paired with taste, so

that he avoids the grotesqueness of those German artists who indiscriminatingly set down both the lovely and the ugly. He did not crowd his pictures with a plethora of suggestive accessories, but preserved a unity of purpose and attained directness of result



A CUT FROM HOLBEIN'S "DANCE OF DEATH."

through simplicity, through economy of labor. The "Dance of Death," a subject that has had its fascination for many an artist, down to the nineteenth - century German, Alfred Rethel, was treated by him with human sympathy and humor and with occasional satire. He represented Death allleveling, attend-

ing the preacher in the pulpit, driving the plowman's horses, snuffing the nun's candle, pouring out the wine for the king, lurking behind the worldly-minded pope. And all in good taste. What a difference between this and the visions that some earlier artists had of similar scenes. All drawn, too, with the same sureness and control of the resources of the block; little cross-hatching, no wasted lines, every stroke telling with a vigor

and directness which, as Ruskin and others have pointed out, makes it quite unimportant whether skeleton Death has the correct number of ribs or not

In the Lowlands, Lucas van Leyden, Hendrik Goltzius, Christoph van Sichem, and particularly Cristoph Jeghers (1620-1660), who reproduced the bold energy of some large drawings by Rubens with a free and effective touch, are among those who followed the pioneers of the art. "Hercules in Conflict with Envy and Discord" is an excellent example of the vigor of Jeghers's works after Rubens, who, himself, has practically set the stamp of his approval on them by the legend "P. P. Rubens delineavit et excudit." The earlier, fifteenth-century workers are dealt with in detail in William Martin Conway's "Woodcutters of the Netherlands in the Fifteenth Century" (1884).1

What strikes one when turning to Italian work of this period is that there is less attempt at characterization than in the German cuts, less uncouth vigor, but more grace, more attention to beauty of line, more ornamental quality. Expressed in a somewhat elementary manner, but expressed nevertheless. Germany," says Lippmann, in his "Art of Wood Engraving in Italy in the Fifteenth Century," "the proper function of book-illustration was instruction: in Italy, ornament."

In Italy, as in Germany, outline was first used, but the employment of parallel lines for shading, and especially of cross-hatching, came more slowly. The outline, little aided by hatching, was developed into a style of some distinction, used alone by the Venetians, ¹ More recent is M. J. Schretlen's "Dutch and Flemish Woodcuts of the 15th Century" (1925), well illustrated.

and with spaces of solid black (a device which occurs again in our time in the drawings of Daniel Vierge and others) by the Florentines. Comparatively few examples of Italian wood cutting are known of the years before the art began to be used for book-illus-



ITALIAN WOODCUT BY AN UNKNOWN VENETIAN MASTER OF THE 15TH CENTURY.

An Illustration from Colonna's "Hypnerotomachia Poliphilii."

tration, and it is in this field that its development can best be traced. A famous product of the time was Colonna's "Hypnerotomachia Poliphilii" (Venice, 1499), with its delicately designed and delightful pictures, in which the shifting scenes of this dream of love are brought to view. The illustrations in F. Frezzi's "Quadririgio" (1508), in grace and slenderness of

figures, recall the style of Botticelli. Another important book is Nicola de Malermi's "Italian Bible" (Venice, 1490) illustrated with numerous very small woodcuts, vignettes, intended, it is said, to aid the uninstructed reader, as a sort of pictorial index, but incidentally of decided vigor and grace. There are very many titles in this record of achievement, to which Friedr. Lippmann and others have devoted volumes of history and comment. The illustrated books printed in Florence alone are listed in Paul Kristeller's "Early Florentine Woodcuts" (1879), which is copiously illustrated with characteristic examples. And the Prince d'Essling's voluminous work on "Les livres à figures Vénitiens" is an important publication. The field of early book-illustration in Italy forms a fascinating study in itself.

With the sixteenth century there came also more separate prints, not executed for book-illustration, larger in size and bolder and broader in treatment. Those of the "Master I. B. with the Bird" (so called from his signature) with much straight uncrossed hatching, or Niccolo Boldrini, who engraved after Titian and others with a swinging, free, though somewhat loose, stroke.

This seeking after large pictorial treatment and striking effect was served also by the adoption of the "Chiaroscuro" or "camaïeu" method, which was an outcome of the desire to reproduce color.

Chiaroscuro ("clear-obscure," balanced light and shade) was used to represent drawings executed in a few tones on tinted paper with white body color for the lights. To do this, a block was

made for each tone and one for the outline, although sometimes this last one was omitted, as in "The Miraculous Draught of Fishes," "David Slaving Goliath" and other works by Ugo da Carpi. These tones of green, sepia or bistre, occasionally brownish red, were printed from the flat surface of the block, as in the Japanese woodcuts, the white lights having usually been produced by cutting away the wood, so that it would not take color. The effect was an imitation of flat-tinted drawings, the high light standing out so by contrast with the surrounding color that it seems whiter than the white paper margin of the print. In Cranach's "St. George on Horseback" gold takes the place of the white. As in all printing from two or more blocks or plates, exact register was a necessity. That is, the sheet of paper, as it passed from one block to the other to receive an impression, had to be placed always in the same position so that the tint would be imprinted in the right place. Papillon in his "Traité de la Gravure" (1766) shows impressions from the various blocks needed for one chiaroscuro print.

Many of the sixteenth-century artists applied this method. So Ugo da Carpi, both the Cranachs, Hans Baldung Grien (whose striking "Witches" is often reproduced), Burgkmaier (who, among other things, did a "St. George" and an "Emperor Maxmilian," both on horseback, in dark red), Tobias Stimmer, Johann Wechtlin, Hendrik Goltzius, C. Jeghers, Jan Lievens, Andrea Andreini. If originals are lacking, excellent reproductions will be found among Lippmann's facsimiles, in W. J. Linton's "Masters of

Wood Engraving" and in other works dealing with the history of wood engraving.

This chiaroscuro method persisted in wood engravings of the middle nineteenth century in flat tints of blue or pink or light brown. Not a few American title pages (e. g., "Ladies' Wreath and Parlor An-





THE ANNUNCIATION.

By Geoffroy Tory, From a Prayer Book, Paris, 1527.

nual," about 1850) were thus produced. And those who remember the old-style theatrical posters may recall this same effect in a cruder form, figures in black lines on a background of one tint, with heavy white parallel lines for high lights. They illustrated the method in the simplest possible way.

The activity in the publishing of illustrated books

¹ The chiaroscuro method has been practiced also by artists who have taken up wood engraving as a means of original expression: Lepère in France, for instance, or the young Americans, R. Ruzicka and A. Allen Lewis.

was likewise great in France. But it is only toward the end of the fifteenth century that work of note began to appear. These illustrations of the last fifteen years of that century, as we see them, for instance, in Vérard's "Mer des Histoires," have more ease, more facility in execution than the average German work of that period, are characterized by more elegance of line, more feeling for artistic effect. The "Danse Macabre" (1485) and the books of hours of A. Vérard, Pigouchet, Simon Vostre, Kerver, issued during the years 1480-1510, are among the best examples of this French work. In the effort to imitate the art of the miniaturist, outlines were engraved to be filled in with color, and the first books of hours were printed on vellum in order to facilitate this task. Geoffroy Tory (1485-1554), who has something of the facility of the practiced illustrator of later days, and Jean Cousin (1501-89) are two of the principal artists whose names are brought into connection with the development of the art in France during the fifteenth and sixteenth centuries. Its characteristics are brought out in the French edition of the "Dream of Poliphilo" (1554), the illustrations in which, ascribed to Cousin, show more elegance, realism, ornament and dramatic action, and less directness, simple beauty and strength than the Italian original.

Jean Papillon, who wrote a "Historical and Practical Treatise on Wood Engraving" (1766), is one of the last and somewhat lost disciples of the art in an age in which it had come to be neglected. For the tendency to multiplication of detail and to delicacy and

refinement beyond the means of the art at that time caused it to be gradually abandoned everywhere, and to be practically supplanted, in the eighteenth century, by line engraving, particularly in the field of bookillustration, in which it had so long reigned supreme.

A new impulse came from England, where the art had not thriven particularly, although, in the early eighteenth century, Edward Kirkall and John Baptist Jackson had kept alive some interest in it.

Thomas Bewick (1753-1828) was the founder of the new school of wood engraving, the school of the "white line," to which I have already referred. In all the work that we have been considering the cutter was limited to a line for line rendering of a line drawing. Bewick introduced a method of obtaining color values by placing white lines on a black ground, placed there not to reproduce lines, but to indicate tone or color. Or, as it has been cleverly described, formerly the block was treated as a white surface, like paper, on which the designer obtained grays and blacks by increasing the number of hatchings and cross-hatchings; now, the block was treated as a black surface, and the color was lessened in proportion as more white lines were cut. This threw more responsibility on the engraver than formerly. The designer was no longer limited to drawing on the wood such lines as he wished the engraver to reproduce. He could execute his drawings in washes and abandon the line if he chose; it was the engraver's business to give the effect of such a drawing by an arrangement of lines conceived by himself. In other words, the engraver was called upon to exercise original artistic ability and taste. This new method was likewise a labor-saving one. Black lines, being in relief, could be produced only by cutting a channel on each side; and if they crossed each other, which happened with greater frequency as the true nature of the art was more misunderstood, the diamond-shaped interstices between them had to be dug out laboriously. White lines, on the other hand, were simply engraved



A WOOD ENGRAVING BY THOMAS BEWICK.
This illustrates the process and effect of white line.

in intaglio, that is, they were grooves cut into the wood as in copper engraving, and that was all there was about it. If the engraver desired to cross them, he did so, just as you would cross-hatch with a pen on paper; the interstices simply remained in relief and showed black in the printing. In J. Tinkey's "Mount Lafayette," which appears on page 183 of G. E. Woodberry's "History of Wood Engraving," lines cross each other, of course—the lines of the trees, for instance, and those of the mountains beyond—but there

is no cross-hatching as such. None of black lines, I mean; but plenty of white ones. On the snow, the white-capped mountain, the sky. A look at such a print will show clearly of how much manual labor the engraver, forced to grind out black cross-hatching, was relieved by the use of the white line. An engraving entirely different in execution, Pannemaker's "Rebecca," published in P. G. Hamerton's "Graphic Arts" (1882), is a fine example of effects gained by modulated lines—parallel lines varying in thickness according as they run through shadow or light—without cross-hatching. An early use of the white line appears in the "Banner Bearer" by Urs Graf. But there it is used like the black line, being simply a white line drawing on a black ground.

Bewick rendered a further service to the art by substituting boxwood cut across the grain for the planks of pear or other soft wood running with the grain. Thereby gaining a material of more strength and firmness, yet without the resistance of the fiber. In the older days knives were used, so that the makers of the engravings were literally "wood-cutters," while in these later days the graver or burin was employed. This again had its influence on the character of the work, for the knife was drawn toward the engraver, while the burin is pushed away from him, plowing forward through the wood. In every graphic art, the medium (that is, the tools and the substance on which they are applied) both through its nature and the manner in which it is manipulated, imposes itself upon the result to be attained, in the form of certain methods of technique, from which the engraver can no more

get away than he can depart from the rules of grammar in writing. And to engrave on wood with the methods of copper engraving is much like attempting to speak English by the rules of French.

Chatto's "Treatise on Wood Engraving" (1839) gives an interesting illustration of technical processes; for instance, the lowering of certain portions of the block (by cutting away), in order to diminish strength of impression. This is usually accomplished by the printer, in the process of "making ready," which consists in placing pieces of paper under the wood block and others in the press above ("underlaying" and "overlaying" respectively), so as to exercise unequal pressure, and thus make some portions print more heavily than others, lending emphasis or equalizing pressure according to need. Printing is an art in itself, and must be understood in order to obtain the most satisfactory results. Although wood gives more impressions than the soft copper, it, too, wears off in time, so that in our days an electrotype (metal cliché) of the block is made, which can be printed from and renewed as often as desired.

Bewick's lasting claim to fame is his right to be called the father of the new art of wood engraving. As a designer he was not great, but he was an honest and close observer of nature. As an engraver, he had the advantage of working after his own designs, giving him the opportunity of rendering, with the initial force of original expression, his spirited bits of animal life, and his delineation of landscape as he saw it under the influence of his emotions. His "British Quadrupeds" (1790) and "British Birds" (1797), the

latter referred to charmingly by Charlotte Bronté in "Jane Eyre," contain the most striking examples of his simple effectiveness, his ability to make every line tell and to waste none.

So came about this revival, really a new birth.

And yet, while Nesbit and Clennell, both pupils of Bewick, and others who came after, practiced the art and developed it artistically, there were not wanting those who committed the old mistake of trying to make the block do the work of the copper-plate, who forgot that the nature of a medium imposes inevitable laws for its use which must be respected. Robert Branston, who had been an engraver on copper, applied the traditions of that medium to wood engraving, producing hard, metallic effects and missing the opportunities of the white line. But he was an able engraver and cut clean and neat lines, and that seems ever to have been attractive to the many. There were followers in his footsteps-William Harvey, for instance, for whom John Thurston and others designed in the same spirit. The famous large engraving by Harvey, "The Assassination of Dentatus," with its copperplate effect in excessive cross-hatching, is an example of misplaced dexterity. In the United States, a noteworthy example of this tendency is to be found in the Family Bible issued by the Harpers in 1846, illustrated with designs by John Gadsby Chapman, engraved by J. A. Adams. Not a few of these are so finely executed in their linework as to have an almost deceptive appearance of copperplates. But the most remarkable instance of a downright attempt to translate the methods of copper engraving is seen in the work of Blasius Höfel, an

Austrian. In his portrait of Czernin both line and stipple are imitated to deception.

In Paris, Didot and other publishers furthered the cause of wood engraving by the publication of many books illustrated by artists of ability. One of these latter. Doré, followed precedents of past centuries by himself directing the efforts of the engravers into desired methods of expression. His training of Pisan and Pannemaker and others of that school resulted in a manner that has smoothness, brilliancy and elegance. joined with a rather cold, metallic quality. With all their finish, these engravers knew the value of time. In the "Deluge," in Doré's "Bible," the continuous lines running across the waves mark gradations or shadows by being made thicker or thinner. No crosshatching there, no time for that: Doré kept his engravers busy by working at an astonishing rate of speed. They assuredly gave a highly effective rendering of his illustrations to the Bible. Dante and other books, strong and dramatic, not only in composition and gesture, but in the suggestion of color and tone as well, in the bursts of radiant light in which Milton's hosts of Heaven appear or the pits of darkness that yawn for the lost souls of the "Inferno." Only, the fine effect, the declamatory gesture, the trick of manner, become a little monotonous if too many of these pictures are looked at in succession.

In Germany, the entirely different style of "His Little Excellency," the ambidextrous Adolf von Menzel, who adhered to the facsimile method, was faithfully reproduced through his influence over the engravers. A style which took no special account of

the nature of the block, for Menzel simply drew spirited pen-drawings, cross-hatched where he found it necessary, and for the rest exacted obedient imitation from the engravers, among whom F. W. Unzelmann is specially well known. For the manner in which it was done, the evidently loyal copying of his delicate and vigorous lines, I hope the little giant was duly thankful. In the woodcuts after his compatriots Alfred Rethel, Ludwig Richter (a joy to the sympathetic eye, despite his apparent artlessness), Schnorr von Carolsfeld (whose Bible pictures have in recent years been revived for schoolroom and popular use) and Moritz von Schwind there are indications of a national feeling and a return to simple lines and facsimile engraving.

There is much of this facsimile work, too, in the English illustration of the sixties, in the service of which some very interesting artistic individualities expressed themselves-Keene, Millais, C. Green, Boyd Houghton, Walker, Sandys, Tenniel and others. The fact that many of these engravings were published in magazines does not lessen their art value. On the other hand, not all is good, for the engravers got into bad habits of carelessness, of "near enough" facsimile, as Linton called it. The Dalziels, because of their very prominence and of the good work they did, as in Birket Foster's "Pictures of English Landscape," have been especially berated for their shortcomings in this respect, and we have stories of Leech, Rossetti and other artists who bewailed the havoc their drawings underwent at the hands of the engravers. But were the artists entirely without blame? Did they

not sometimes put down unintelligible networks of senseless and needless cross-hatched lines, with all that such lines implied in the way of increased work on the block? Ruskin once figured out that in a certain drawing by Tenniel, in *Punch*, 1863, two square inches of shadow under a window are cross-hatched with three sets of lines, "in the most wanton and gratuitous way," making it necessary for the engraver to cut out about 1,050 interstices. And if, in addition, the block was then cut up into little square sections which were handed to different engravers, what could be expected?

Charles Keene, the greatest artist who ever drew for *Punch*, and one of the most able of English draughtsmen, showed that cross-hatching was not an absolute necessity. But his delicate lines also suffered from these defects in reproduction, as was shown by the facsimiles of his original drawings in Pennell's "Work of Charles Keene."

Meanwhile, wood engraving more than ever filled the function of a powerful means of instruction. It helped to disseminate knowledge by representations of objects of industry and art, by pictorial records of those happenings that make up what is contemporary history, by the portraiture of the men who played an important part in those events. It furnished in caricature a vehicle of education by the force of satire, or a source of amusement by the display of humor. And in the exercise of this function it had the benefit of wide circulation offered by the periodical press. For the art was promoted by the establishment of illustrated papers such as the *Magazin Pit*-

toresque, L'Illustration, Illustrated London News, Graphic, Illustrirte Zeitung, Harper's Weekly and similar ventures. Or publications devoted entirely to art. such as Kunst unserer Zeit. Such illustrated literature formed the only artistic pabulum for people far from the great centers with their object lessons in the form of art museums, public statuary and fine architecture. And that fact inevitably influenced the publishers in the choice of works of art to be reproduced. Modern work usually, figure work often, preferably genre pieces with the point of sentiment and anecdote to prick the laggard brain, and attract the careless eye, fine finish always, as a matter of course. Especially in Germany and Austria, where Hecht and others accomplished much good work, and where finely illustrated books gave opportunity for the display of finished skill. Elsewhere, too, as in that famous subscription book, "Picturesque America," issued in the seventies in New York. So the tendency toward facsimile line work, as exemplified in the engraving of designs drawn in line on the wood, and the desire to express tones, as shown in elaborate reproductions of paintings, had both continued to be felt, when the latter received a strong impetus from a source that was eventually to prove the undoing of the art. That was the photographic camera, which now became a factor in the production of wood engravings.

From the moment that the artist's design, instead of being drawn on the whitened block by himself, was separately drawn and then photographed onto the block, his possibilities were much increased. He could now work with any medium on any material on any

scale; the camera reduced it all to the proper size for the block. He might use pen-and-ink, or wash, or body color, or oils, or crayon, or anything he pleased. The engraver was an interpreter, who chose his own lines to render the artist's gradations of tone, and who had a duplicate photograph (or the original drawing) before him as his hand cut away the one on the block. And in no country were the possibilities opened up by this difference in method exploited to a greater extent than in the United States, where the record of noteworthy achievement had previously been a short one, preceded and accompanied by much downright mediocrity.

Alexander Anderson, a disciple of Bewick, was applying white line in the beginning of the nineteenth century. But wood engraving did not have its opportunity until-the first impulse came from the publication of the Family Bible by the Harpers, followed up by the issue of other illustrated books by the same firm, the Putnams and the American Tract Society. Good workmanship and taste was displayed by Whitney, Herrick, Henry Marsh, who executed some remarkably faithful and delicate transcripts from nature in his pictures of butterflies; A. V. S. Anthony, who had a decided influence on book-illustration; W. J. Linton, a master of the art, and others. Linton's "History of Wood Engraving in America" is the indispensable record of this period.

Toward the end of the seventies, new methods were heralded in some engravings by Smithwick, and more extensively applied by F. Juengling in the reproduction of drawings by J. E. Kelly in *Scribner's Monthly*. It

A later consideration of the "new school" is offered in my "American Graphic Art" (1912).

was a matter of tones and tints and gradations carried to the utmost, of an effort to give a facsimile of the artist's touch, no matter in what medium he had worked, as absolute as had been the facsimile reproduction of line in the days of old. The engraver not only strove to duplicate the effect in all its details as the artist had produced it, but he tried also to show how he had produced it. In other words, the grain of the crayon drawing, the mark of the brush or the very shadow cast by the heavily loaded streak or blot of color, were reproduced with fidelity. There was prompt war. The partisans of the new idea were elated by this new-found power. The opponents denounced these efforts as vain tricks. W. J. Linton, a firm believer in the engraver's right to interpret and not copy, with clever arraignment of indisputable faults, contended that, even granting the legitimacy of the aims, they failed through encompassing too much. As a proof, among others, he points out Whistler's portrait of himself, by Frederick Juengling. In the painting there was color to indicate the right eye, though definite form was wanting. In the engraving, says he, the color is translated into a black surface and the right eye has become a sightless socket. Yet in copying Whistler's dry-point of "Riault, the Engraver," J. F. Juengling had an opportunity of applying the imitative faculty to line work, and therefore produced a facsimile engraving, an excellent example of absolutely exact rendering.

But we need not fight the old battles anew. The noise of the fray has ceased long since, and the smoke has cleared away. The "new school" went on its

way, did its work and subsided, practically driven out by the same agency that first established it on the highway to success,—the camera. We may to-day safely admit that these men committed errors of judgment, that in the first flush of delight at a new-found strength they gave vent to artistic solecisms. They often overshot the mark in the attempt to render with their one instrument all that which the painter had effected with differences in strokes of the brush, and variations in application of color, and with the color itself. There is sometimes a feeling of unrest in these short, choppy lines cut in all directions in the effort to reproduce the swirl of brush, the burst of color. But the almost incredible refinement of technique in this work is astounding. With remarkable virtuosity the resources at command were forced to the utmost possibility of expression. Time always eventually weeds out the bad and consigns it to oblivion, while it holds that which is good. And in the great total of this work there is so much that is good that it will always be a delight to look back on this brilliant period in the annals of wood engraving in this country. The Society of American Wood Engravers' portfolio of twenty-five prints is a sort of monument to this achievement. The Scribners also issued a volume of proofs, and some fine and characteristic examples appear in Linton's "History," already mentioned, and in S. R. Koehler's monograph. published in Vienna.

Many finely illustrated books were issued in this short span of fifteen, or at most twenty, years. But there were also many separate prints, and the opportunity to get these has still not entirely gone. There



FOREST OF FONTAINEBLEAU.

Wood engraving by Elbridge Kingsley after Corot.

An example of the modern American school of wood engraving.



WINTER (THE FOX HUNT).
Wood engraving by Henry Wolf, after Winslaw Homer.

are the strong portraits by Gustav Kruell, the vaporous, sympathetic rendering of George Fuller's very individual art by W. B. Closson and Elbridge Kingsley's reproductions of paintings by Corot. There are original wood engravings, too, done directly from nature. by Kingsley (who has sometimes printed in color). Closson and Wolf. Some of these men are dead, Kruell, Johnson, Smithwick, Bernström, King, Wolf. Davis, Heinemann and many more. With the exception of Timothy Cole, who has continued to practice his art with serene accomplishment; Henry Wolf, who in his last years devoted his talent especially to the sympathetic reproduction of American paintings; Kingslev, and William G. Watt, who carried on traditions with distinction, they nearly all turned from their old profession to other fields of activity. Some to painting: not a few entered the service of the photomechanical processes which were their undoing, and engraved on halftone plates. But their work is still here, to be seen and to be had. One need not go far to seek it, or to discover the names of the many engravers not here mentioned. American wood engravers are particularly well represented in the Boston Museum of Fine Arts and at the New York Public Library, and there are smaller collections elsewhere.

As to the state of the art in the nineteenth century in European countries, illustrated books reflect that, and certain art magazines, as I have indicated. But there exists a very adequate pictorial review of this period in the form of the illustrations in a large quarto dealing with wood engraving in the nineteenth century. It is published by the Gesellschaft für Verviel-

fältigende Kunst of Vienna, and is one of four volumes constituting a work on reproductive art in the nineteenth century. The text is in German, but the numerous illustrations speak their own language, clear to those who try to understand. It is a record of nineteenth-century art which is not duplicated elsewhere, and that is why I have referred to it repeatedly. It may be seen in the New York and other libraries, and ought to be in more.

Among the European works which have been sufficiently regarded to be preserved, are some of the portraits and reproductions of paintings by the old masters by Charles Baude. The fact that so many fine wood engravings have been widely disseminated in illustrated periodicals may have mitigated against the acceptance of the art by connoisseurs, who have preferred the air of exclusiveness which envelops the etching of small edition. That implies the rejection of a fine work of art because by modern inventions in printing it is possible to put it before the people in a weekly or a magazine costing ten or twenty-five cents!

The general modern tendency to tone is no doubt partly the result of the desire to make known and to know the works of painters, for which purpose wood engraving was the best and most practical means at hand. Certainly the art of wood engraving, through the domination of this tone movement, became absolutely a reproductive art, doing that which is now done by the photogravure and other processes. Formerly, when the artist's line drawing was cut in facsimile, there was at least the semblance of originality with the force of appeal which that implies.

Various reasons have been given for the decay of the art of wood engraving, and there is probably justification for all of them. It is probably a complexity of causes that we must seek and not one single one. Processes based on the use of the camera, especially the cheap and quickly executed "halftone," were bound to take the place of the simpler forms of wood engraving. Perhaps, too, familiarity has bred contempt, and the "shop" system, if I may so call it, did its part. That existed even at an early date, so in the Venetian ateliers of the sixteenth century, and in the nineteenth century it became so developed that a firm-name under an engraving stood for a division of labor in which one apprentice did the hair, another the clothes, and still others were put at further specialties. The result may be imagined. A sort of repetition of the old story of the killing of the goose that laid the golden eggs. If we deplore the fact that the art is so little practiced to-day, we may at least be thankful that existing conditions must of necessity promote originality of expression on the part of the few who still receive enough support to persevere, men like the Americans whom I have mentioned, or that clever Frenchman, Alfred Prunaire, who can work with dash and bigness and vigor, as when he renders drawings by Daumier, sometimes with a touch of color, and whose hand is capable of the utmost delicacy if the subject demands it.

The newest development of the art of wood engraving is in the direction of original production. The movement has spread to various countries and has enlisted the most different individualities. Artists are to-day engraving their own conceptions directly on the

block, just as they produce original etchings. They have raised the block to the dignity of a painter's medium, a means of direct expression. Painter-engravers they are, or painter-wood-engravers, if you prefer to coin a quite correct though cumbersome term. Professional engravers, as we have seen, have at times engraved "directly from nature" and produced beautiful work. They approached the task with the engraver's training and willingness to fill spaces with lines, whether to indicate detail or shade or local color. So they have made pictures of a comparative completeness of effect. But the painters have attacked the matter in a somewhat different manner. They seek the indication of effect rather than the fulfillment of it, decorative line or space rather than richness of detail. They use the block for the production of simple and few lines, flat tones of gray or black or color. They have in general recognized the essential character of the wood, and have respected it in their manipulation of the block. The best and most characteristic of their productions are unmistakably wood engravings and have no imitative leaning to any other process. No attempt to render the peculiar snap of the fine line of etchings, for instance. All honest, straightforward wood engraving. Two elements are particularly noticeable here: the tendency to use the simple line of the facsimile engraving of old, and the influence of the Japanese woodcuts. It is a not large but certainly interesting gallery of artistic types that passes before my mind's eye as I recall some of these very modern aspects of an old art.

The Frenchman, A. Lepère, uses the vigorous, heavy

line of the earlier engravers, but with a perfect command and an absolutely modern and intensely personal swing, as in his etchings. His picture of Notre Dame de Paris and the river, bathed in brilliant sunset glow, is made up of a combination of heavy lines and rich tones.

His fellow-countryman, Félix Vallotton, absolutely different again in style and intent, makes a clever use of contrast of black and white surfaces, a device used by the old Florentines, as we have seen. Vallotton applies the spots of black without halftones or gradations, submerging all the darker tints into black and all the lighter ones into white. So he gives us a portrait of Dostoievski or Zola, or a street full of people bunched in rushing crowds.¹

Henri Rivière, Paul Colin, Lucien Pissarro (son of Camille) and other Frenchmen use the wood block for polychromatic printing; often with the most daring use of color.

Similarly the experimentative Emil Orlik throws broad spots of flat color into impressions and sketches of peasant life or "gossiping women." Karl Moll renders a snow effect in its broad aspect without attempting to force the block to give the delicate shimmering shadows which Biese found it possible to throw into his color-lithograph. There are numerous others in Germany and Austria who are devoting more or less attention to chromo-xylography or color-printing from wood blocks: Otto Eckmann, Adolf Zdrasila, Wilh. Laage, Kurzweil, Walter Klemm, Hans Neumann, Hofbauer.²

William Strang, among English artists, is one to

¹ Original wood engravings are used effectively as book illustrations by Pichon and others to-day.

² Expressionism and other phases of the modern spirit in Germany are to-day finding an outlet in black-and-white.

whom line work on the wood must have appealed. Bernard Sleigh, C. Ricketts and others have sounded various notes of interest on the block, some devoted to black-and-white, others to color. William Nicholson's "London Types" are depicted in a few tints, with blacks as we see them in Vallotton's works, but with a quite different temperament, both national and individual.

In our own land, B. J. O. Nordfeldt, G. W. Plank, H. McCormick, R. Ruzicka, A. A. Lewis, J. J. Lankes, Rockwell Kent and others have exemplified the variety of effect obtainable from the wood block. The principles of color printing from wood blocks are expounded in the little "Ipswich Prints" by Arthur W. Dow, "simple color themes," as the artist calls them. And Helen Hyde worked quite in the Japanese manner.

Japanese influence is apparent in much of this, and modernity in all of it. Nationality and individuality combine to demonstrate the suppleness of block and graver in prints so varied in style.

The influence of the Japanese is no unimportant factor in the development of modern art. I have not in mind the direct and sometimes cheap imitation, but the more subtle and finer influence felt in many ways since Europe first began to awaken, in the sixties, to this new force in the art of the world. It is found in the paintings of Whistler, the etchings of Mary Cassatt, in the work of certain poster designers, and in contemporary wood engravings printed in color.

The Japanese color print, forming one phase of the art of "Ukioye" (the floating or passing world) represents a school which, we are told, is held somewhat

in contempt by the artists of the Tosa and Kano Schools, which are based upon Chinese classical traditions. I remember hearing John La Farge say that he found it expedient to repress mention of Hokusai when speaking to these courtly upholders of tradition. But to us Caucasians the *nishikiye*, or color-print, is one of the best known forms of all Japanese art, and this same Hokusai stands to many as its most familiar representative.

Chromo-xylography, or color printing from wood blocks, had its period of finest development in Japan during the eighteenth and early nineteenth centuries. It has a wide and varied range of style and treatment, from its early beginnings to the decay which we are told was foreshadowed even in the exaggerated elongation of face and figure in the work of Utamaro. To the inexperienced there is an apparent sameness in all these prints, but a little study will show that the style is discernible through the conventions of schools, and that the work of the masters of the art stands out with individual emphasis. Fenollosa brings this out clearly in his characteristically illustrated "Outline of the History of Ukiyo-Ye." Many other authors have well described this fascinating art: Strange, Seidlitz, Goncourt, Revon, Perzyński, Kurth, Holme, La Farge. Good color reproductions of the prints are not wanting, and fine public collections of the prints themselves may be studied in various print rooms.

Originally drawing this art from the Chinese, the Japanese developed it into an intense, immediate expression of national artistic spirit and of national life. The latter point is worth noting. For while the subtle

artistic feeling may be obscured at first sight to the unaccustomed eye by the exotic style, a frank consideration of these prints as records of social life will bring them closer through the touch of human interest. One becomes more reconciled to the strangeness of the style, the mask-like faces, the queerly-shaped limbs, and the other signs of conventionality, on discovering again that humanity is the same the world over. In these products of the golden age of Ukioye, the life of Japan stands before us. Laborers are shown at their occupations, coolies dragging burdens, fishermen busy with nets and cormorants. Toyokuni, Utamaro and Suzuki Harunobu depict women under all sorts of circumstances, at the toilet, "opening letters with a hairpin," bleaching cloth, dressing the hair, applying rouge to the lips, cutting out a dress, or putting up New Year decorations. Koriusai and Kitao Shigemasa show us children playing at "battledore and shuttlecock," blowing soap-bubbles or making snow images. Portraits of actors are signed by Torii Kiyonobu, Torii Kiyomasu and others. An interesting note occurring repeatedly is the love of nature, amounting to a sort of æsthetic cult. The practice of going out in parties to see the cherry blossoms is illustrated, and such titles as "Gathering Lotus," "Peach Viewing," "Snow Viewing," "The Voice of the Cicada," "Listening to the Song of the Insects," are frequent. "Smoking Out Mosquitoes" indicates that even here the placidly æsthetic contemplation of nature has its limits. The "peerless mountain," regarded by the Japanese with loving reverence, receives its apotheosis in Hokusai's two famous series, the "Hundred Views

of Fujiyama" and the "Thirty-six Views." We see the people in street and in workshop, at home and traveling, in an ever-shifting endless series of characteristic scenes. Conventionality and the development of technique have not killed the vein of human sympathy.

The art is indeed bound in certain conventions in its expression, but its expression is so summary that we are spared the wearisome repetition of conventional detail. And who would say that the decorative effect, the bold sweep of line, the construction of the whole, the unerring juxtaposition of colors, are impaired by these conventions?

The power of synthesizing, of suppressing unnecessary details, is possessed by some of these Orientals to a very remarkable degree. This results in vigorous, artistic snap-shots, such as some of the familiar dashingly-brushed pictures of crows or other birds, or impressions such as the masterly one of a pouring rainstorm, with figures struggling up a hillside road toward the left, by Hiroshige, or some snow-scenes by the same artist.

This absence of excessive finish forms one of the charms of Japanese color-prints. The line in these woodcuts is economized, becomes in truth a symbol, and has calligraphic affinity. Outlines to indicate form, no shadows, no detail except the necessary; sometimes even an omission of the lines circumscribing spaces to be filled with color, such as the pattern on a dress or the flower in Kiyonaga's picture of two women gathering iris, printed in a flat tint, without outline. This outline of form set down as a basis for color, but form and color offered in decorative harmony, in per-

fect adjustment of means to end. With quiet disregard of all niceties of execution which are not absolutely necessary to such end—linear and aërial perspective, details, expression of features, and differentiation of faces. Not necessarily are all disregarded at one time, but each at one time or another.

In technique these prints are the direct outcome of the materials employed. Moreover, the means used are the simplest possible. The Japanese engraver cuts his design with a knife on a plank of cherry-wood running with the grain, not across it. The design is not drawn on the wood, but on a transparent paper, which is pasted face downward onto the block, to guide the cutter in his work. It will thus appear reversed in the wood, and will come out right in the printing. The engraver cuts around the lines of the design, and removes the spaces between them by means of chisels, so that the lines stand out in relief. The block so cut is the "key-block," bearing the whole design, and to be printed in black. From this an impression on thin paper is taken for each color intended to be used, and each impression is pasted face downward on a block, after being marked so as to show what portion is to be printed in the color in question. The portion so marked in each case is cut around so as to stand out in flat relief. Frequently two or three colors are combined on one block. In printing, the sheet passes from one block to the other, until all the colors have been impressed upon it. Sometimes a special effect is obtained by an impression from an uncolored block. which produces an embossed design in white. This process is used to good effect for delicate patterns in

garments, clouds, white shells or water. All of that does not sound very complicated. But in the first place the method of taking an impression by means of a hard. little shield, known as a "baren," which is rubbed over the back of the paper laid down on the wood-block (they did much the same in Europe in the fifteenth century), calls for skill and experience. And incidentally, it may be noted, too, that as the printer lays down his paper on successive blocks, he has nothing to guide him but two little registering marks, a rectangular notch on the right side of the plank, and a straight one on the left. One may occasionally see evidences on the prints of wrong register, where colors overlap, or white streaks show. But what is of more importance is the freedom allowed the printer and the demands made upon his artistic capabilities. For the whole matter of expressing the original design in its colors and gradations is left to him. With us, the engraver produces gradations by his lines, and the inking roller deposits a uniform film of ink. With the Japanese, the cutter furnishes lines to bring out form, and otherwise provides only flat masses in relief for colors. The water-color, mixed with rice-paste, is laid on the block with the brush, and the printer applies it in stronger or more delicate tints, as desired, producing all needed gradations. The last are, therefore, created independently of the wood-cutter; they are painted on the block. The process may be compared to that used in printing etchings, when a film of ink is left on unetched parts of the plate, over and above that held by the etched lines. The two methods are akin in this respect, that they both leave to the printer the realization of certain effects intended by the original designer. A detailed and most interesting account of the whole process, written by T. Tokuno, and edited by the late S. R. Koehler, was published in the report of the U. S. National Museum for 1892.

Early in the eighteenth century black-and-white prints were colored by hand. Then came printing in color, rose and green only being used at first, but used with remarkable resourcefulness in distributing colors with relation to each other. Kiyonobu rings a gamut of possible changes of harmonious arrangement in these two colors. As the art developed, with Suzuki Harunobu the field became enlarged from the actor-print (the popular demand for portraits of actors had formed a not unimportant incentive to the production of prints) to a wider range of subjects, and from the few tints first used to a wealth of color applied in endless variety, with fine sense of balance. In the exquisite effects attained the grain of the wood and the texture of the paper play their part. If it is seen that the earlier work is characterized by subdued color, while the later shows a preference for brilliant tints, it must also be noted that some of this effect in the older prints is due to the fading of the colors, just as time may have added a mellow richness to old paintings. Whether the cause be simple or complex, it results in delicate, low-toned tints of exquisite effectiveness.

With Kiyonaga, although he gives outdoor feeling without cast shadows, landscape assumed greater importance; it was eventually to develop into an element of prime interest. By Hiroshige, landscape is rendered for its own sake, not as a mere background accessory.

And what impressions of his native land he gives us in the simplest, broadest elements of form and color!

Notwithstanding the democratic spirit of wood engraving, it has thus produced a most sensitively developed form of art. The simplest materials have sufficed for an expression of consummate art. Or, perhaps, I might better say that the very limits of the means used have intensified subtlety. As E. F. Fenollosa said, speaking of A. W. Dow's experiments in printing pictures in a few flat tints: "It strengthens the artist's constructive sense in that it forces him to deal with simple factors." But with foreign appreciation of the art of color-printing there came its decay in its native land. Occidental influence has been felt, and the Japanese has leanings toward cosmopolitanism. And what does the future hold? It is pleasant to contemplate the efforts made—as in the periodical Kokka—not only to record pictorially various phases of the art of Japan, but to hold especially, in a measure, this old art of color printing. But it does not seem that a renaissance of an art so purely national, "the spontaneous outcome of a joyous nation," is very likely to take place under present conditions. Whatever the future may have in store for the art of Japan, her heritage in the color-print of old is one whose influence, the influence of a highly developed sensitive artistic spirit, has overspread the civilized world.

The possibilities of the wood block have been exploited to a remarkable degree. It has rendered line and tone, given the precision of the pen-and-ink sketch or the etching, and the free, granular irregularity of the charcoal smudge, translated paintings with the set

regularity of the line engraving on copper or, abandoning the line per se, with an attention to tone and color and texture, which gave even the illusion of painty brush marks. It has been used for the rudest handbills and for the most elaborate reproduction of famous works of art; it has served as an original art, as a direct means of expression, and, crossing the bounds of the black-and-white, it has imitated wash-drawings in two or three tints, and has entered the domain of colorprinting in elaborate reproductions, as well as in the highly sensitive form of art exemplified in the Japanese chromo-xylograph. It has been employed to illustrate in the rudest form the songs and ballads hawked about the streets, and in perfection of craftsmanship works such as the Doré Bible. It has been put to the practical use of producing wall-paper, and it has brought forth works treasured by the collector, though so different in style as the engravings after Dürer or Holbein, and those which are the work of some of the modern disciples of the art in the United States. The sum of its accomplishment is so wide and varied that there are many possibilities of enjoyment, even for those who believe that in the abandonment of the line in the reproductive work of modern times the art has been forced into a sphere not its own, or that its proper field is black-and-white, and not color. Although these, too, will ascertain and appreciate the noblest expressions of this modern striving after ideals sometimes unobtainable.

Above all, it is clear that the attractive element in wood engraving is undoubtedly the impress of the nature of the material used, the wood block, with both its

resources and its limits, its strength and its weakness. And it is in proportion as he has realized this nature and expressed it, that the engraver will give force to his appeal to our admiration and sympathy.

The use of linoleum, in recent years, as a material on which to engrave in relief, farther illustrates the influence and interest of the medium. The springiness and surface texture of the linoleum add a special character to the color prints thus produced.

CHAPTER VIII

LITHOGRAPHY

THERE are varied pleasures in store for those who become interested in the peculiar charm of lithography.

A supple medium this is, ranging in its possibilities of expression from delicate silvery grays to deep velvety blacks, from masses of tone to the slightest pencil-like sketches; a process of many effects, produced by tools of the most varying description: crayon, pen, brush, scraper; a method of lines coarse or fine, of tones, of washes, in black-and-white or in color; an autographic art, reproducing the artist's touch absolutely; displaying his individuality without the intervention of any human translator; an open, personal manifestation of his design and intention, with the full impress of his character; an art which does, of course, call for adaptation on the part of the artist to its nature and limits, but for comparatively little technical preparation; eminently a medium for the painter, permitting "each temperament to assert itself."

Yet, despite all its resources and possibilities, its ease of acquirement, lithography did not retain its first strong hold as a painter-art. Taken up enthusiastically by many artists soon after its invention, it

went through a period of brilliant achievement, particularly in France. Then its use as an art for artists lapsed, and commerce claimed it for its own, developing its resources to a high degree in the more mechanical and practical aspects. And this very extensive commercial use of lithography may have served to keep the glamour of high art from this reproductive method. That may account in part for the want of attention given by public and artists alike to lithography as a medium for original expression in art.

In recent years, painters have again turned to it. But they cultivate it in a somewhat different spirit from that of the older men.

Lithography is susceptible of the most varied treatment, flexible to a remarkable degree. The manifold opportunities which it offers have been seized and utilized by various artists, in accordance with their individual style or tendency or subject. The centenary exhibitions of artistic lithography, held in 1895 and 1896, in Paris, London, New York City (Grolier Club) and elsewhere, graphically illustrated this, as do also the representative gatherings of examples in the various print-rooms. Failing those, there is the well-illustrated small folio on contemporary lithography, issued by the Gesellschaft für Vervielfältigende Kunst, of Vienna, or J. and E. R. Pennell's "Lithography and Lithographers" and "Some Masters of Lithography," by Atherton Curtis. It must always be remembered that even such fine reproductions as the Vienna book offers cannot ever quite take the place of the originals, for the grain of stone or transfer-paper, the finer details of the intimate personal

touch of the artist must suffer somewhat from the intrusion of the network of lines, be it ever so fine, in the half-tone, or the fine grain of the photogravure. Nevertheless, these books form invaluable pictorial records of the art, and of the application of its resources to individual needs.

Lithography can imitate other graphic arts in an astonishing manner. But in the end it cannot give the absolute quality of the art which it copies. It will remain a lithograph, even under the cloak of borrowed characteristics. It may prove profitable and legitimate in commercial work to substitute the lithographic process for others when it gives practically the same result with greater ease and cheapness of production. But in original work-painter-lithography, as it is called-attempts to make the stone speak an artistic language that is foreign to it must be deprecated. The medium may be molded to the individual style. You have but to place lithographs by artists as different in temperament and manner as Horace Vernet, Gavarni, Menzel, Whistler and Greiner side by side to see that.

It is an interesting and noteworthy fact that Aloys Senefelder, the inventor of lithography, foresaw practically all of its possibilities of development in their general outlines. Senefelder, a poor author, made his invention while searching for an inexpensive mode of printing his literary productions. Called upon one day to write out a laundry bill at short notice, he jotted it down on a slab of limestone from Solenhofen, on which he had been practicing reversed writing with an ink containing wax, soap and lamp-black. It occurred to

him to submit the stone to the action of acid, which etched away the stone, except where the lines resisted it, and this left his writing sufficiently in relief to be printed from. This was in 1796, and his subsequent experiments produced a surface to be printed from which was practically neither in relief nor in intaglio, so that lithography has been named a planographic process.

The perfected method of this surface-printing involves a chemical process, being based on the lack of affinity between fat and water. The drawing is executed on the stone with a greasy crayon or ink. A very weak solution of acid is then applied to the stone. The chemical effect of this is to increase the affinity of the drawn lines for fatty substances and to increase the resistance to the same in the portions of the stone not drawn upon, the resistance being aided by the addition of a solution of gum arabic. The acid, therefore, is not applied, as in Senefelder's first experiment, in order to eat away the untouched portions of the stone, so as to throw the drawing into relief, but simply to effect certain chemical changes. Water is then applied, which will be held only in the white spaces. If a stone thus prepared is rolled up with ink, it will accept it wherever it has been drawn upon, and will repel it elsewhere. In the lithographic press, the stone and the paper on it pass under a bar of wood called the scraper; this is the hand press.

For crayon drawing, the commonly-employed method, the stone is given a grain, so that the crayon may "take hold." A crayon sauce may be applied with rags. Pen or brush may be used, with lithographic

ink, or the stone can be covered with a layer of ink, from which the lights are scraped out, as in mezzotint engraving. Spatter-work has been produced, especially for posters, by drawing an edge across a brush charged with ink. Engraving or etching on stone consists in preparing the stone with gum, so that its whole surface would refuse to take ink. Into this surface the design is then scratched with a point, graver or diamond, and wherever the stone is thus bared it will take ink. Darley's well-known illustrations for Judd's "Margaret" were done by Konrad Huber in this manner.

The heaviness of the stone led eventually to the use of the so-called transfer paper. On this specially prepared paper the artist executes his drawing in lithographic crayon or ink, and this drawing is then transferred from the stone to the paper by being placed face downward on the stone and run through a press. This has another advantage for the artist: it obviates the necessity for reversing the drawing, which always exists when he draws on the stone or the wood, or engraves or etches on copper. His drawing is reversed in the mechanical process of transferring, and comes out right again in the printing. This transfer process, by the way, can be used also where large editions are to be quickly produced, for all that is necessary is to keep on taking impressions and transferring them, so that a given design may be transferred to as many stones as desired, and printing from the same can go on simultaneously on as many presses. But delicacy may be lost in re-transferring.

An outcome of the desire to find a lighter substitute

for the stone is the use of aluminium plates. They have been employed for the artist-lithographs of Cornelia Paczka and others in Germany, where this form of the art is known as *Algraphie*.

Lithography is the youngest of the reproductive arts used as a medium of original expression, an autographic art in which the artist works directly in the production of the print.

Some years after Senefelder's invention, various German artists tried their hand at this new art, for which so much was claimed. There is a weak woolliness and indecision in much of the early crayon-drawing on stone, which does not emphasize either the intense blacks or the delicate grays of which the medium is capable.

But the new art was soon more extensively employed, and with more virtuosity, by the French, who seemed to enter more into its spirit and its possibilities. A "Lancer," done by Horace Vernet, in 1816, has been regarded as the starting-point of serious painter-lithography in France. It has the silvery gray tone characteristic of the early French work, both professional and amateur. For the art, so easily acquired, attracted men and women of good society, so that we have portraits by Antoine Philippe d'Orléans, Duc de Montpensier, and a view of the Château de Rosny, by Marie Caroline, Duchesse de Berri, among others.

In that very facility lay danger, for it caused many to take up the art who were either not fitted to give utterance to its finer forms, or who applied themselves to it temporarily as a source of income and a convenient method of reproducing drawings for illustrations. This last-named motive is one frequently encountered even in the work of the best men.

It is with lithography as with etching. A good painter is not necessarily a good etcher or lithographer. The painter-lithographer, like the painter-etcher, must arrive at a full understanding of the peculiarities and characteristics of his medium. He must choose it for its own sake as a means of artistic expression. If he be not impelled by preference to the use of the lithographic crayon, surely his performances will be as halting and stammering as utterance in an unfamiliar language. It will be found that the most satisfactory work is often that which was done con amore, without thought of the public.

J. B. Isabey was among the earliest painters to practice lithography; his vaporous and silvery crayoning shows particularly well in the delicately-treated figures of cavalier and lady in his "Stairway of the Great Tower of the Château d'Harcourt" (1821). Here the lines are lost in an even, grained tint. A similar, if perhaps less delicate, handling appears in "Le Paresseux," by Pierre Guérin. The grain is more pronounced, the crayon lines clearly separated, but the gray still adhered to, though with a somewhat duller effect, in the drawings of the Baron Gros, Girodet-Trioson, Guérin, Hersent, Grenier.

Aubry-Lecomte seems to have been at home in both manners. He reproduced Girodet-Trioson's "Ossian" designs (1821) in coarse-grained, broad parallel gray lines, and copied Bonnefond's. "Italian Pilgrim" (1838) with suppression of line and absolute smoothness, in "one of the most finished and finest

pieces among French lithographs." His style predisposed him particularly to the reproduction of paintings by Prud'hon, which latter artist also worked on the stone.

Gradually the sometimes colorless gray gave way to a full octave of tones, the lightest relieved by deep notes of the darkest black, resulting in fine contrasts highly suggestive of color.

This was a period of brilliant achievement in France. Géricault, who died in 1824, is one of the earliest who found new ways of saying things. His realism and reaction against academic rules are echoed in his lithographs, among which are a number of studies of horses. "At a time," said Bouchot, in his interesting book on lithography, "when softness of outline and timidity of accentuation made lithography to be little but a light and imponderable sketch, he was able to communicate brilliancy and warmth, vigor of aspect and opposition." Delacroix, the famous painter, showed "what vigor and color the lithographic crayon can acquire in the hand of a master." As drawings and as illustrations his "Hamlet" and "Faust" series are not remarkable, notwithstanding Goethe's enthusiastic praise of those for his own poem. They have a certain dramatic power despite their somewhat selfconscious and "truculent romanticism." But considered purely as lithographs, in some of his pieces the audacity and impetuosity of his method are highly interesting. In "Macbeth and the Witches" (1825), executed almost entirely by scraping thin white lines out of a dark ground, "Lion de l'Atlas" (1829), or "Tigre Royal" (1829), he seems to have well-nigh

exhausted the resources of the stone in the vigorous rendering of shadow and color suggestion. In the presence of such ardent expression one overlooks faults of form.

Barye, the noted sculptor of animal subjects, did not strike such an intense, dramatic note on the stone, and possibly used the medium rather as a ready means of sketching. It is interesting, too, to compare this savage fauna presented by Delacroix with ferocity, almost, in the manner of attacking the stone, with the domestic cattle depicted later by Rosa Bonheur, who, like Delacroix, carries her personality as a painter into her lithographs. One might say, perhaps, that both animals and art appear tamer in her lithographs, if that would not seem to cast reflection on one whose work was as satisfactory in texture and handling as hers, The strength of her lithographs stands out in contrast to the reproductions, good though they are, of her paintings by skillful lithographers such as Soulange-Teissier and Sirouy. And while we are tarrying with such later animal-painters, a word must be given to Brascassat, whose "Etudes d'Animaux," though perhaps not equal to Rosa Bonheur's studies, are yet virile and noteworthy productions.

Returning to the earlier men, I find one more animal draughtsman to mention, but mainly by way of a contrast, as a foil to throw work such as that of Delacroix into startling relief. That is Victor Adam, facile, prolific, smooth, sure of himself in his little field, whose always well-groomed and fiery horses are as smooth as his style, who hardly ever went far enough to commit an outright faux-pas. His was the art of

a kind promoted by publications such as the lithographic annuals and albums issued during the twenties and thirties by the Gihaut brothers, in which lithography was used primarily as a means of illustration. Still in such books, as in the files of *Charivari*, *La Caricature* and similar comic papers, are preserved many interesting and characteristic examples.

Most of the artists of 1830 lithographed more or less; so did those of the Barbizon school. Millet did a little; the stone of his "Sower," done in 1851 for L'Artiste (which periodical actively promoted the cause of artistic lithography), was unfortunately mislaid after one proof had been taken, and found to be much damaged when impressions were taken from it in 1879. He introduced the figures in four large lithographs of adventures among the Indians, executed by his friend and neighbor at Barbizon, Karl Bodmer, who traveled in North America in 1832-34 with Alexander Maximilian, Prince of Neuwied, and pictured the forest and its inhabitants, both in lithography and in etching. Diaz made drawings on stone, some of them in a playful vein. Corot, one regrets to find, neglected a medium which was apparently so well adapted to his style. Dupré, on the other hand, signed several interesting lithographs, rich in blacks if not very subtle. And you may come across one of the few by Frère, such as "Les Images," or by Appian, who has here a personal touch as in his etchings. With Decamps we come again to a painter who draws exceptional effects from the rich gamut of tones that lies between the white of the paper and the deep black that the crayon can give. The painter-quality is strongly in evidence

even in his little sketch of a "Fox-hunter" (in which the scraper is used with discreet freedom), and his power in suggesting color is shown particularly well in the picture of "Children Frightened by a Watch-dog" (1830).

It is significant that the scraper was freely used by painter-lithographers as a means of lightening shadows and indicating form, while it was more sparingly employed, or not at all, by the professional lithographers. The latter, in their well-finished portraits, used either an even-grained tint in which lines were lost, or the elaborate cross-hatching of crayon lines, which was finally developed into a mechanical formula that finds its height of well-regulated inanity in the almost innumerable drawing copies by Julien, from which so many of us gained our first idea of drawing when we were children.

A free use of the scraper is found also in the works of Aimé de Lemud, with qualities pleasing to both artists and public, among them the famous "Master Wolfframb" (1838) and "The Return to France" (the coffin of Napoleon I., borne by soldiers and surrounded by spectres of the *Grande Armée*). This effective instrument can be utilized in two ways: white lines can be drawn on a black ground, as did Charlet, or the instrument can be wielded as in mezzotint, producing semitones.

This mezzotint method was employed with remarkable effectiveness by Eugène Isabey, the marine painter, the exuberant bravura coloring of whose canvases is echoed in the rich tones of his lithographs. "He knew instinctively where his accents should come



Delacroix, in his use of lithography, gave brilliant proof of the flexibility of that medium of many and rich possibilities. Lithograph by Eugène Delacroix.



NOCTURNAL REVIEW.
Lithograph by Auguste Raffel.

Raffet, precise and documentary draftsman of the French soldier, here depicts a phantom world in a pale, silvery light of ghostly suggestiveness. A remarkable achievement of delicacy of tone.

to produce a harmonious whole," says Atherton Curtis. His influence is evident in the work of his pupil, A. Hervier, who branched out into a technique of his own, however, using crayon, scraper and brush, and cleverly imitating spotty wash drawings. Hervier's painting, "Petite Rue du Port, Environs de Morlaix," was translated into lithography by Bargue; the sky is grained, but foreground, houses, figures and boat are all brought out by scraping vigorously, wildly if you will, but with a characteristic effect. It should be looked at closely to study the technique, but not so near by when it is desired to see the result. Paul Huet, like others of this group, produced work that fairly palpitated with strong feeling for color, in which the pale gray crayonage of earlier days is quite lost to view.

This work, or at least much of it, is pure painter-lithography, produced, whether for publication or not, as a more intimate expression of the artist's personality. But lithography was utilized also to illustrate phases of life which directly interested and amused the public. And the glorification of the army was particularly popular.

The soldier of France was shown at home and in the field, in camp and in the roar of battle, by Raffet, Bellangé and Charlet. Through these pictorial representations of the *Grande Armée* there moves the figure of him who gave it its reputation, the "Little Corporal," idol of the people. Raffet was the most highly endowed of these artists who helped to perpetuate on stone the Napoleonic legend and to feed the popular appetite for military glory. His lithographs form valuable military documents. The tattered and poorly

fed soldier of the Republic, the fiercely mustached grenadier (vieux grognard) of the Empire, the soldier of Constantine and Sebastopol, were delineated by him with keen observation, as individuals and in masses, large bodies of men being handled with a remarkable combination of detail and breadth. For his large battle-scenes, spontaneous though they appear, are carefully studied in detail, though balance is preserved by insistence on essentials. He has even followed the German poet J. C. von Zedlitz into the unseen world in his depiction of the "Nocturnal Review" of the phantom of the Grand Army by its Emperor, around whom the long lines of cavalry are sweeping with noiseless gallop, emerging from the misty distance into the pale light which overhangs the scene with ghostly suggestiveness. This dramatic scene is hardly more impressive, however, than the irresistible forward movement of the long lines behind the mounted Emperor in "Ils grognaient mais le suivaient toujours" ("They grumbled but followed him always").

Raffet, as far as I know, is the only lithographer beside Senefelder to whom a monument has been erected.

Charlet's art was more consistently joyous. His theme was the intimate life of the soldier. His prints illustrate the eagerness of the schoolboy to carry the grenadier's musket, the braggadocio of the drummerboy, the persuasiveness of the recruiting sergeant, the reminiscential garrulity of the veteran. To-day we realize that in his productiveness, Charlet at times fell into the weakness born of the mannerism which fecundity and facility are so apt to engender. And a

manner adopted as a means of quickly arriving at a desired end means frequent repetition of things done before, instead of always renewed study of nature.

However, the sum total of Charlet's productions shows so much good work, so much spontaneous and immediate observation of life, and such sympathy with the spirit that animated his countrymen, that it stands in its entirety as an achievement of note in the records of lithography. He, too, though usually sketching in broad crayon-strokes, turned at times to the scraper, as in a figure of a Turk (1823) done almost entirely in white scratches on a black ground.

The vein of humor in Charlet is more pronounced in the lithographs of those who are directly identified with the comic art. Lithography, serving as a means of picturing contemporary manners and ideas, became a vehicle for caricature, both political and social, and as such enlisted a number of able artists in its service. Among these were both the illustrator Doré and the animal painter Jacque, as well as L. L. Boilly, whose many groups of heads ("The Antiquaries," "Reading of the Will," "Childhood," etc.) represent a somewhat heavy species of humor, but are cleverly drawn. More directly identified with caricature were Philipon, Traviès, Grandville, Henri Monnier, Decamps the painter, and others whose records are told in the annals of the comic art. But the two most conspicuous examples of a union of artistic talent of a high order and an appreciation of the nature of the lithographic process, placed at the service of caricature, are Honoré Daumier and Gavarni. A number of their works are reproduced in the monographs

by Frantz and Uzanne and by Elizabeth Luther Cary.¹

Daumier is an artist of undoubted power, whom his most enthusiastic admirers have placed among the greatest painters of all time. As a lithographer, he paid little attention to the niceties of technique, but worked with a big stroke, that is most telling, if perhaps a little brutal in its attack. He used the scraper, but in a summary manner; so in the picture of a man with a woman by his side, fishing in a pouring rain, which is indicated by long, oblique, white lines. His "Ventre-Législatif" (the Chamber of Deputies of 1834), and his "Enfoncé Lafayette. . . . attrape, mon Vieux" (the funeral of Lafayette, with Louis Philippe dissimulating his joy), are excellent examples both of his method in lithography and of his force as a pictorial satirist.

Gavarni had less elemental force, less of the painter's spirit, and more elegance and brilliancy. To him the stone was a ready means of reproducing his pictorial satire. His earlier drawings, in which he placed fine lines and delicate tones with discriminating care, are quite different from his later and best known work, in which he handled the crayon and stump with sketchy verve, and a spirit which had a decided manner in its expression, but at the same time shows a keen observation of the weakness of humanity as evidenced in attitude and gesture. His "Enfants Terribles," "Fourberies des Femmes" and "Les Propos de Thomas Virelocque," unroll a gallery of types and characters in which very adequate illustration of witty dialogue or a ludicrous situation is quite apt to captivate the mind ¹ The ten volumes on Daumier (1925-27), in Delteil's "Peintre graveur illustré," give a reproduction of every print by him.



ENFONCÉ LAFAYETTE . . . ATTRAPPE, MON VIEUXI Lithograph by Honoré Daumier.

Daumier, great caricaturist, great lithographer, great artist. In this print, one of his masterpieces, the compelling force of the salire is evident. But one may also note such a detail site. Tremarkable transparency and distance" of the vista of Pete Lachaise.



THE BEAR PIT IN THE ZOOLOGICAL GARDEN.
(One of the "Attempts on Stone with Brush and Scraper.")

Lithograph by Adolf von Menzel.

Another noteworthy exemplification of the great variety of effects possible in lithography.

and allow it less freedom for criticism on purely artistic grounds.

Lithography became the vehicle for caricature also in Germany and Austria, though not with the same artistic force as in France, and from Vienna it was transplanted for this purpose to the United States by the late Joseph Keppler, founder of *Puck*. In England, on the other hand, I can recall only one instance worth recording of a departure from the use of the wood block in this field, and that is John Leech's "Children of the Mobility."

If caricature thus availed itself of the lithographic process to depict contemporary life in its humorous aspects, the direct portraiture of the individual enlisted its service to an even greater extent and with more display of care and finish. These elements one would naturally expect here, for they appeal to the general public.

Achille Devéria produced much commercial work not worthy of his powers. But he signed also drawings which place him at the head of portrait-lithographers in France. Such a one is the portrait of Victor Hugo, dated 1829, drawn with a free touch of the crayon, the face in delicate tones, the coat with broad lines; or the full-length picture of the elder Dumas in his younger days, extended on a sofa in a nonchalant attitude. A reflective, psychological vein characterizes his best portraits, attention being directed mainly to the head. It has been pointed out, too, that he knew the value of accentuation by blacks, as in the hair of Dumas. His virtuosity was applied also to the delineation of the ladies of his time, with spirited ele-

gance and fine appreciation of the charm and grace of body and movement under the ridiculous toilettes of the thirties, as the late Henri Bouchot pointed out in his interesting little volume "La Lithographie."

Also happy in the portraiture of the "Eternal Feminine," though more suave, more smooth, less personal, was Grévedon, the soft, insinuating grayish tone of whose work lend a charm of a certain appropriateness to these subjects. Léon Noël, Baugniet, Llanta and Belliard are among those who helped to increase the large number of lithographed portraits which are well enough executed to have undoubted value as records of noted personalities, and which have their place in the portfolios of public print-rooms. They bring us nearer to that professional "lithographer's touch," with its delight in clean workmanship, in tints laid on with careful avoidance of an individual note, or in lines crossing and crossing yet again.

It would make a long list were I to refer to all the Frenchmen who have drawn on the stone with more or less success in these seven decades of the nineteenth century, either habitually or tentatively. The list would include Ingres, Vernier and Lami, artists different in aim and manner. But mention must be made of Mouilleron and of Célestin Nanteuil, both skillful craftsmen, and characterized by Bouchot as "translators of the first rank," and as among "the great colorists of lithography." The tendency as to subject and the capabilities in delicate expression of Nanteuil are well-exemplified in the suggestive "Cupids Guarding the Door." Both of these artists did very much in reproductive work, and so lead us naturally to a field to

which I have several times had occasion to refer while considering original lithographs in the main. The old question will be raised again: Should reproductive work be considered? Why not, if it is good? Lithography has done its share in fulfilling an important function of all reproductive art, the preservation of the records of painting in black-and-white copies of its masterpieces, as well as of less important works.¹

The gray tones of the earlier lithographs were adapted to the reproduction of but few paintings. Being applied nevertheless, we have as a result much colorless work. But later on Gilbert, Sirouy, Pirodon, Bouvier, Jules Laurens, Chaplin, Leroux and others rendered paintings by various artists, particularly Frenchmen, with more range of tone and with intelligent skill (shown, for example, in the change of style to suit each case in Laurens' "Galerie Bruyas").

It remained for Theóphile Chauvel, in the seventies, to illustrate the possibilities of the art in translations of paintings by Troyon, Millet, Isabey, Decamps and Bonington. They are simply extraordinary in the adaptation to the style of these men, in the individualized rendering of their manner to the very brush marks. He applies delicate crayon work to produce a sky by Troyon, or fine scraping to relieve the darkness of the black body of a "Beagle" by Decamps, and to give form and texture. Simple methods, no juggling with the materials. Chauvel seems to have drawn the full measure of possibility from lithography in a field in which the soft crayon had once failed to show sufficient vigor and suppleness. These last-named faults, resulting in the want of variety, of color-suggestion,

The late John La Farge bore witness to this.

already referred to, were apparent also in much of the earlier reproductive work in Germany, where the medium was assiduously employed, especially in the production of folio volumes of the class of J. N. Strixner's copies after the old German masters, the Munich "Pinakothek" pictures by Ferdinand Piloty and others, or Franz Hanfstängl's edition of the "Dresden Gallery." Much of this work was careful and creditable, with artistic feeling, though perhaps lacking in a certain delicacy of sympathy, and somewhat monotonous in tone. Here, too, there gradually came more ability to enter into the coloristic peculiarities of the original. Feckert's portrait of Ravené, after Knaus, is an interesting example of this.

Hanfstängl himself did portraits with a certain smooth originality, and with care and skill. Allowing for the difference in national temperament, his portraits may be classed with French work such as that of Grévedon, although he strikes richer tones than that artist. It is interesting to compare his portrait of Senefelder (1834) with N. H. Jacob's picture of the same subject printed in Paris fifteen years earlier. Both are almost pure crayon work. Hanfstängl's undoubtedly much superior in technical facility, but hardly, if at all, better in characterization or feeling for color values.

The story of painter-lithography in Germany and Austria is not so long a one as the French record. The Achenbachs both drew on the stone; Andreas's "Coast of Capri" (1855) is of special interest as an example of lithographic pen-drawing. One might cite other cases of sporadic use of lithography, but there

are four names which stand out above the rest: Kriehuber and Pettenkofen in Austria and Krüger and Menzel in Prussia. The first two were the masters of original lithography in Austria. One work by Kriehuber, who drew with a free touch, has been reproduced more than once in American publications, I believe. That is the "Morning with Liszt" (1846), a group comprising Liszt, Berlioz, Czerny, Ernst and Kriehuber himself.

Franz Krüger, known as *Pferde-Krüger* on account of his skill in depicting horses, not only did military and sporting scenes, but also a number of portraits which bring him close to some of the best Frenchmen in this field, not only in the artistic control of his medium, but also in his insight into character.

The most prominent figure among German painterlithographers was that remarkable draughtsman, Adolf von Menzel. His earliest published work of importance, "Künstler's Erdenwallen" ("Life Journey of an Artist," 1834), executed with the pen, moves in somewhat conventional technical lines, but shows originality in conception. His improvement in pen work was rapid, and it was in the same medium that he eventually published, in an extremely limited edition, his studies (over four hundred) of the uniforms of the army of Frederick the Great. In these "fashion plates." the figures are not stiff, but full of life and action. His "Memorable Events in the History of Brandenburg and Prussia" (1836), in crayon, with an occasional touch of the scraper, already indicates strongly his faculty for historical research, as well as his ready grasp of technical methods whenever he approached a

new medium. But the work which fixes his prominence among German artist-lithographers is the series of six plates entitled, "Essays on Stone with Brush and Scraper" (1851). In these, as also in the larger "The Boy Christ and the Doctors in the Temple" (a characteristic study of modern Jewish types), he scraped the lights out of an ink wash on the stone, hence the introductory vignette on the title-page, showing brush and scraper dancing a wild roundelay. With what virtuosity this method is here used, an examination of this set will show.

In the "Transport of Prisoners through the Woods," movement and atmosphere are rendered in remarkable manner. The fearful straining of the horses to pull the heavy wagon up the hilly, muddy road, the dejected attitude of the soaked prisoners, the rider galloping toward the castle dimly seen through the mist and driving rain—all this is pictured with absolute sureness and perfect command of materials. The gloomy effect is increased by the use of a tint-stone, that is, a second stone from which a flat, grayish tint is printed on the sheet. another print of the series, "The Bear Pit in the Zoölogical Garden," the scraper indicates in white the drops of water thrown off from the pelt of one of the exceedingly life-like bears. One recalls here the different method of Barve, who in his "Bear of the Mississippi " apparently worked up the black hide from light to dark, adding crayon-strokes to get the required depth, doing less in the places which were to appear more light,

The earliest English work has historical rather than

artistic interest, C. Hullmandel being somewhat prominent as a printer and experimenter who brought various improvements into the art. During the three decades after 1820, half-a-dozen names stand out with some prominence. Richard P. Bonington, a "distinguished and precious nature," easily takes the place of honor. He died at the early age of twenty-eight, but left some sixty lithographs, mostly views of architectural monuments, of an exquisite delicacy. These, says Beraldi. in his useful dictionary of nineteenth-century engravers ("Graveurs du XIXe Siècle"), are marked by "such picturesque qualities and so personal a color that they acquire the importance and interest of veritable original compositions." His most important work appeared in Baron Taylor's voluminous "Voyages pittoresques en France" and includes the "Rue du Gros Horloge, Rouen" (1824), generally considered his chef d'œuvre, and the "Tour du Gros Horloge." The atmospheric effect of the first and the composition and clouds of the second, have been singled out for special commendation. James Duffield Harding was an artist of some mannerisms, but of amazing facility and dexterity. His "Sketches at Home and Abroad" (1836) are printed from two stones in tints, with whites scraped so vigorously out of the stone that they stand in little ridges above the paper, which has been forced into the scraped hollows in printing. "The Park and the Forest" (1841) was drawn on the stone with crayon and light brush washes, a process known as lithotint. These two sets of prints, therefore, illustrate two distinct lithographic methods in the hands of a skillful craftsman with a smooth and finished style. His work shows affinity to that of the noted Swiss painter, Calame. Smoothness and finish also characterize the very numerous portraits by R. J. Lane, who had a certain distinction of manner which raised his work above the commonplace of average portraiture. T. S. Cooper's "Groups of Cattle, Drawn from Nature" (1839) are also printed with a yellowish tint and scraped whites.

To jump from England to Spain for a glance at the bull-ring scenes by Goya, is to emphasize a strong, almost crass, contrast, for that fiercely vigorous genius treated the stone with the same rough energy as he did the copper, and with a similar virtuosity.

With the fifties there began the ascendency of commercial lithography. Business interests finally claimed the art as their own and it passed from the hands of the artists, and as a means of original artistic expression was thrust practically into the background. However, commercial exigencies brought about great improvement in color-printing, resulting in such masterpieces as Louis Prang's reproductions of the objects of art in the Walters Collection. They have also promoted poster-designing, which Chéret, Grasset, Willette and others have raised to the dignity of an art.

In more recent years there has become manifest a revival of interest in this fascinating art of painter-lithography. And the most interesting feature of this renaissance is that the art is used with perhaps a greater variety in handling than ever before, certainly with a noteworthy attempt to emphasize its flexibility

in the revelation of individual aim and temperament. In looking over these new manifestations of the art, instinct with modernity in purpose and statement, it is not the generalizing characterizations of "silvery grays" or "velvety blacks" that come to mind and lip, but the outcome of individuality. There is practical independence of traditional methods. There are the usual solecisms which naturally and inevitably accompany efforts to find new forms of expression in a language, be that language literary, artistic or musical. But the work will all find its level.

The most intense and interesting expression of this new movement is found in France and Germany, although there are some noteworthy instances in England as well. The fresh note of modern impulse was sounded in the album (1892) of the French "Society of Painter-Lithographers," with contributions by H. P. Dillon (who, in his graceful conceits, effectively places pale grays and strong blacks in juxtaposition), Carrière (who, as in his paintings, serves his heads of Goncourt and others in a vaporous sauce). Bracquemond, Chéret (in whose cover for Félicien Champsaur's "Entrée de Clowns" the effect of spatter-work in the shadows may be studied), Aman-Jean, Desboutin the etcher, Willette, Rops and others. Even more advanced are the prints in "L'Estampe Originale," by Besnard, Puvis de Chavannes, Signac, Toulouse-Lautrec, among others. Most of these are color-prints, violent, audacious chromatic trumpet blasts of artistic revolt.

Lunois juggles with the medium, using the brush to produce an astonishing resemblance to wash drawings, but suppressing his identity in reproducing work by Daumier, Ulysse Butin and others. In reproductive lithography, Paul Maurou has shown a vigorous and masterly touch in drawings after J. P. Laurens, such as "Mounet Sully as Hamlet" (1889).

Painters, such as Dagnan-Bouveret, Chartran, Ribot, Detaille, J. Lewis Brown (whose very summary sketches are touched with printed color notes), have occasionally taken up the lithographic crayon, with interesting results, but usually not with sufficient application to leave a lasting impress on the art.¹

One of the most noteworthy, because of his energetic devotion to the enchanting process of lithography, is Fantin-Latour. Originally by scraping and scooping out the stone with an old razor, and subsequently by working on rough-grained transfer-paper, he obtained the inequalities of surface which are so unlike the polished effect of the professional lithograph. Embossed white lines in his lithographs show where the paper has been forced into the un-inked hollows thus cut out. The dreamy imaginings of this "melomaniac painter" are attempts at emotional interpretation of the compositions of Wagner and others, the outpourings of a sensitive and responsive nature. There is a charm in the expression of his manner, the grainy vapor which envelops his figures, dimming outlines and details into indefiniteness and showing an apparent weakness to whoever can see artistic virility only in the hardness of clean-cut drawing. If, in his well-developed manner, there are certain notes and chords which he strikes by preference, they are combined into sonorous harmonies responding to everlast-

¹ For the newer expression in this medium one turns to the work of artists such as Matisse and Utrillo.

ing ideals of beauty which are independent of schools and prejudices.

It is an interesting period, this time of new ideals and headstrong reforms, of diverse "movements" and tendencies, a period which produced at the same time the joyous frivolity and at times quite unnecessary outrageousness of a Willette and the obscure and fantastic symbolism of an Odilon Redon. For both the lithograph served well; "the stone was made for the mystic," say the Pennells. This period has produced works so entirely different as Henri Lefort's portrait of Tolstoi, done with much scraping, and the recent efforts of Maurice Neumont to gain effects, as in a little "study" of the nude, by running long, parallel, straight crayon lines within his outlines.

This ferment of new ideas, this freedom from routine is found likewise in Germany, where the spirit of "secession" finds expression in the general tendencies of local groups, such as exist in Berlin, Dresden, Munich, Karlsruhe, as well as in individual originality and sometimes vagary. For the German will push a new movement to its utmost logical conclusion with methodical seriousness. Even the occasionally strong frankness of the ultra-modern caricatures lacks the light frivolity of French work, showing rather a crushing sarcasm, as mirrored in the periodicals Jugend and Simplicissimus.

In lithography, as in etching and wood engraving, individual expression is strongly developed in these modern Germans. Hence there is much diversity of method.

Otto Greiner, with a fancy for satyrs, centaurs,

bacchantes and similar fabulous beings of by-gone times, is master of the technical means that lithography has to offer. The excess of modeling in his work, which marks him as akin to the etchers Klinger and Geyger, is in striking contrast to the suggestiveness which forms the chief characteristic and beauty of most modern work on copper and stone. Rasch's "Interrupted Devotion" (an old woman looking up from her book) and Franz Hoch's "Eifeldorf," are examples of what may be accomplished by scraping and wiping on a tint. The archaism, the vigorous and expressive simplicity of Hans Thoma, the serious embodiments of religious subjects by W. Steinhausen, have a place by themselves. Cornelia Paczka's figure studies executed in Algraphie (on aluminium), and printed in red, the vigorous head of a woman, done with a blue tint, by Käthe Kollwitz, the fancies of Jettmar, are further manifestations of possible variety. These are a few instances selected almost at random, representing no hint of completeness, and noted simply to point the way to a highly interesting modern development in the revival of lithography.1

As in the more recent etchings and wood engravings, so in lithography, the frequent use of color is a noteworthy feature, in German and French work, at least. It is a far cry from the hand-coloring of the thirties and forties, or the technically remarkable completeness of color effect in commercial work, to this modern application of color as a suggestion, an impression merely. A suggestion so slight in the case of Whistler's "apparently unlaborious notes of pass-

¹ More recently, Max Slevogt has used lithography in very personal illustrations to Goethe, J. F. Cooper and other authors.



PORTRAIT OF TOLSTOI.

Lithograph by Henri Lefort.

This lithograph is vigorously scraped and the background manipulated with stump or rag. Lefort is best known as an etcher.



PORTRAIT OF TENNYSON.

Lithograph by Alphonse Legros.

This print approaches a silver-point drawing in delicacy. Comparison of this with Lefort's portrait of Tolstoi will show some of the variety in effect to be drawn from the lithographic stone.

ing tones and tints" (so Miss Cary puts it) as to appear rather like an expression of æsthetic emotion than an attempt to indicate realization. With Lunois the application of color is much more realistic, and in his "Absinthe Drinker" it rises to a vehement reveling in unctuous blues and reds, palpitating in slight unevenness of tone. These daring effects become more crass in the violent efforts of some of the other men.

In much of the German work the color effect is different again. More complete at first sight, perhaps, but not in reality. Only, here the suggestion often. particularly in the case of the Karlsruhe Künstlerbund group of artists, takes the form of flat, even tints. Such work is essentially decorative, and is, in fact, often directly intended for wall-ornamentation. It bears the signatures of Volkmann, whose "Waving Field of Grain" is quite familiar outside of Germany; Kallmorgen, Otto Fischer, Jenny Fikentscher and others. Karl Biese's "Winter Mists" is a snow-piece of a delicacy that recalls John H. Twachtman's rendering of the exquisite pulsation of subdued color produced by the play of light and shade on the white surface. Such a finished effect, as well as the entirely different methods of the versatile Emil Orlik, who, in "Sonntagsmorgen in Brotzen" and similar work, applies spotty, flat color notes, and of Max Suppantschitsch, who will produce a "Moonlight" in black, with a blue tint (as he used blue paper in etching), further emphasize both diversity of individuality and expression, and the power of the stone to render it.

The one principle that underlies all this modern French and German work, whether the color is applied with frank impressionism in slight spots or strokes, or with decorative use of tints to suggest complete effect (as do the Japanese in their woodcuts), is the use of only a few stones to print primary colors. This is in strong contrast to the system of building up a chromo-lithograph by superimposing tints from numerous stones, twenty if necessary.

Incidentally, it is to be noted that this lithographic work printed in color is the same in principle as the most elaborate commercial productions. There is a stone for each color, and on each that portion of the design which is to appear in the color in question is filled in with black crayon or ink, the color being of course applied in the inking. Fuller descriptions of the methods of color printing will be found in Audsley's "Art of Chromolithography" (1883), in which progressive stages of printing are illustrated in numerous plates. Useful books are also those by the two French printers, Lemercier and Duchatel. The latter's "Traité de Lithographie Artistique" (1893) is a really practical treatise for the artist, in which all sorts of methods are described and illustrated.

A group of three Dutchmen accentuates as many differences in style. The summariness of Storm van 's Gravesande, who shows the same brevity and simplicity of method as in his etchings; the uncompromising exactness of Jan Veth, as in his portrait of Menzel, and the vague indefiniteness of M. Bauer, a sort of Monticelli on stone and copper.

Two of the most noteworthy exponents of painter-

lithography in England, Whistler and Pennell, have been of American birth. Whistler molded the medium to his manner with the same deftness of touch and succinctness in his lithographs as in his etchings, "St. Giles" and "Soho" being noteworthy examples. In a few instances he strove for tone-effects, as in "Limehouse" (quite dark, with some scraping), "The Tall Bridge" or the wonderful lithotint "Early Morning," which really constitute a remarkable appeal to artists to cultivate an art which is so responsive to the touch, and permits of such different methods as the crayon-line, and the tint worked up by means of scraper and rag wiping. Usually, however, Whistler employed the crayon alone, in joyous utilization of the lightness and tenderness of the gray line. His lithographs, says Pennell, "were executed, not to fill the order of an editor or publisher, not in response to fads or movements, but because lithography happened to be the method of artistic expression which, at the time, met his need and mood. This it is which gives his lithographs their distinction. They have the freshness, the spontaneity which is the very life of the art." When he worked on transfer paper he usually completed the drawing after it had been transferred to the stone. The grain of the transfer paper is quite apparent in some of Whistler's figure studies, among them the "Little Nude Model, Reading," with its exquisitely rendered feeling of flesh.

This paleness of line, this abstention from strong blacks, is a feature also in the lithographs of C. H. Shannon, the exquisite modulations of which show that the gray line need not be dull and lifeless as it

once was, often enough, and in those of Will Rothenstein, whose "English Portraits," however, constitute more directly characterized portraiture than the simply

suggestive "Pennell" by Whistler.

The value of the gray is accented also by Alphonse Legros, who in his bust portrait of Tennyson wearing a hat, approaches the shimmering delicacy of a silverpoint drawing, while preserving the full strength of sympathetic characterization. He has indeed, as Pennell says, the "fine repose and serenity" of an old master.

The influence of Whistler may be traced in "The Shop" and similar prints by Joseph Pennell, forming part of the "Spanish Series," well characterized by Whistler himself as crisp and light. The sketchy outlines of these lithographs give place to fuller tones in his "Holland" series, while in the views of Rouen Cathedral he strikes deep notes of vigorous black which throw his delicate treatment of architectural detail into strong relief. Pennell's work is as interesting as it is varied in style. But there are other evidences of diversity of method in England. Legros himself portrayed Champfleury in a frank, freely drawn crayon sketch. Hubert Herkomer handles the scraper with rich force in "Abendlied," one of the illustrations in "Six Easy Pieces for the Violin," composed by himself. Frank Short, a master of various processes, showed painterlike qualities in a landscape sketch in crayon, with a man in a boat in the foreground. The impression which I saw was in a rich brown ink. Thomas R. Way, son of the Thomas Way who did much to in-



LIMEHOUSE.

Lithotint by J. A. M. Whistler.

Much of Whistler's lithographic work was expressed in the tremulous line of the crayon. But sometimes he turned from line to tone (produced with stump, brush, scraper), as in this print, of a rich and subtle suggestiveness.



VIEW ON THE SEINE (A Paris quai).

Lithograph by H. W. Ranger.

duce Whistler and others to take up lithography, has drawn architectural beauties of London, and is known as the translator into black-and-white of Whistler's portrait of his mother.

Alma Tadema, G. F. Watts, Marcus Stone, J. M. Hamilton and Alfred Parsons did a few lithographs, and F. Brangwyn, S. Pryse, J. Copley and E. Gabain are drawing notable results from the stone.

And where do American artists stand in this new movement? They have not yet entered on the eve of a revival, apparently. Yet ability is not wanting. nor some record of past achievement. Not a long record, it is true. It begins with Rembrandt Peale's large portrait of Washington (the one in the stone frame, be it understood!), which shows such a grasp of the possibilities of the new art that the insignificance of his smaller portraits is not easy to account for. It passes, this record, over the long list of commercial work, of mediocre portraits which saw the light in the thirties, forties and fifties, to note the personality or the individual work standing out clearly above the rest. Such a one is the portrait of W. P. Dewees, after Neagle, by M. E. D. Brown, who here rises above himself in a stunning bit of effect, with vague outlines and strong shadows, with apparent influence of the old-style stipple engraving on copper in the treatment of the coat. Or occasional performances by F. D'Avignon, or Albert Newsam. Newsam did much work of deadly dullness, but also some of such merit that I know of two or three amateurs at least who have made collections of his portraits. The graceful and facile touch and smooth manner of Napoleon Sarony were exercised mainly in commercial work.

Perhaps the first example of pure painter-lithography is Thomas Moran's "Solitude" (1869), a view on Lake Superior, a picturesque and finished performance. Entirely different in style, simple in subject and treatment, with a quiet charm of their own, are J. Foxcroft Cole's "Pastorals" (1870), eight in all. To the work of these two men are to be added the half-a-dozen Civil War "Campagne Sketches" of Winslow Homer, and Wm. M. Hunt's two prints of a little hurdy-gurdy player and a flower-girl, the latter especially delightful in its painter-like qualities. If such achievements appeared to hold promise of future effort, the promise was not fulfilled, beyond a few attempts by Edwin White and others, and much later by C. A. Vanderhoof. In the nineties an attempt was made to found an American Society of Painter-Lithographers. It came to nothing, although a number of artists tested the capabilities of lithography as an autographic art. Tested it, too, in some cases, with a noteworthy understanding of its potentialities. The effective use of the scraper in two figure pieces by the experimental J. Alden Weir shows that. So do the two Paris views by H. W. Ranger, especially "On the Seine," in which the artist has admirably caught the atmosphere of a wet day with its tremulous grav sky and its glint of rainy pavement.

A crayon-and-scraper sketch of a lady in an opera box (1891) constitutes an "early and only attempt" by Miss Cassatt, and John S. Sargent has drawn some studies of models in big, black strokes. And what are we doing to-day? After these sporadic but promising efforts of the past, what have we to show to-day if we leave out Whistler and Pennell? Albert Sterner has done masterly figure studies. A. B. Davies shows sensitive adaptation of the medium to various subjects. Robert J. Wickenden produced such characteristic pieces as "La Mère Panneçaye." C. F. W. Mielatz used lithography to good effect in a series of twelve views of the less familiar landmarks of New York City, executed for the "Society of Iconophiles." Add W. J. Glackens, John Sloan and Ernest Haskell, and you have about all. To that and to the few other prints which I have mentioned the collector of American painter-lithographs is limited, and he may be thankful if he can get some of those.

It is a pity that an art so supple in expression, so fascinating in its rich resources, so absolute in its reproduction of the artist's touch without the intervention of any other agency, should not have called forth a fuller and readier response to its appeal. Whatever the cause, or causes, we can but hope that present conditions are not final; that there will come the spirit and energy to take up this art, and the public appreciation necessary to support the effort.

The excellent work accomplished in the first half of the nineteenth century so identified the art with certain aspects of method, virtuosity in rendering the scale of gradations from the white of the paper to deep richness of black, that to the conservative the modern methods that have been applied to the stone must have seemed at first very revolutionary. These pencil-sketch-like, light, vapory impressions of a

¹ Since this was written, things have begun to look more hopeful. Bellows, Bolton Brown and others have taken up lithography with interesting results.

Whistler were so different from the rich, resounding tones of an Isabey. These colorings of a Lunois threw such a startlingly novel note into the technique of the art, a note that rose to some shrillness with Toulouse-Lautrec or Ibels.

Experiments in seeking new ways of using an art are not only allowable, but necessary and commendable. Otherwise, we should not have seen such a movement, for instance, as impressionism in painting. Experiments are born of a desire for giving expression to emotions and ideals in new ways, and are very apt to lead to extremes, at first, in the struggle for recognition of new aims. Energetic devotion to reform in any activity in life generally produces some fanatics who overshoot the mark. To them, the object to be attained assumes such proportions of importance that balance is lost and taste departs from view. And that condition of affairs is aggravated by Philistine indifference or opposition.

But that is never a reason for throwing over a movement in its saner and final aspects. As long as the expression is within the limits of the medium it is legitimate. The writer does not borrow from other tongues in order to produce beautiful passages in English. The sculptor who models a bas-relief does not expect to encroach on the specific domain of painting by applying elaborate gradations of color or aërial perspective. The same rule applies to the arts which we are considering in the present book, the rule that the means must be fitted to the end and the end to the means, the old truth that a medium cannot overstep its limits. Now, the limits of lithography are

quite wide in extent. And the essays of the last fifteen years or so have shown us that the art held within itself further possibilities of expression, possibilities which could serve the younger element of to-day as the art served those brilliant Frenchmen of the thirties whose work has stood as its very embodiment.

CHAPTER IX

THE NATURE AND SIGNIFICANCE OF THE PHOTOMECHANICAL PROCESSES

THE only reason for including this chapter is the importance of these processes in reproductive art. As a medium for direct expression, as a painter's art, they do not come into consideration. For the fact that Frank Short, or Félix Bracquemond, has worked on photogravure plates simply indicates the experimentative nature of clever technicians.

Innumerable processes have been invented to take the place of the various methods of engraving by hand, natural agencies being substituted in order to attain greater cheapness by diminishing the amount of labor and time used. These "substitute processes," as they are called, depend on etching (such as the Gillot or Comte processes) or on mechanical agencies (such as the Collas metal ruling machine), on the making of casts by electro-deposition, etc.

But it is with the entrance of the camera as a factor in such processes that they came to play an extensive part in the dissemination of art knowledge, particularly in the illustration of books and magazines. In the latter field they have practically supplanted wood engraving.¹ They give the artist the same freedom, as to size and medium of the original drawing, that was

¹ Once true! To-day, in this third decade of the 20th century, original wood engraving serves book illustration in France (see p. 193, note), the United States, and elsewhere.

already noted, in the chapter on wood engraving, in connection with photographing on the wood block. Truth and speedy and cheap production are their principal claims.

There are numerous processes for the reproduction, in a printable form, of the photographic image, all being based on the properties of resinous or glutinous substances and the changes which they undergo under the influence of light.

Asphaltum, for example, becomes insoluble when exposed to light. If a metal plate is coated with asphaltum and exposed under a photographic negative, the parts under those portions of the latter which transmit light will become insoluble, while the others can be dissolved, laying bare the plate. If the latter is then subjected to the action of acid, the portions protected by the hardened asphaltum, representing the lines of the design, will be left standing in relief. The result is therefore a relief plate, which can be printed together with letterpress, on an ordinary press, a matter of great advantage. This is the system much used in newspaper work, and is exemplified (with certain changes as to substances used) by zinc etching and other processes. Obviously, if the plate is exposed under a positive, an intaglio plate will result.

Gelatine, again, swells in cold and dissolves in hot water, but loses these properties if mixed with a bichromate and exposed to light, gaining the power of resistance to acid in the operation. If a plate is covered with a bichromatized gelatine film, exposed under a negative and then washed in cold water, the lines protected by the black portions of the nega-

tive, representing the whites of the design, swell ("swell-gelatine process") and thus form a mold from which plates suitable for relief printing are produced. Or a reversed negative can be used, the gelatine hardening under the clear spaces of the negative, representing the black lines of the drawing. Warm water dissolves the unchanged gelatine, ("wash-out process"), leaving the design in relief. From this a wax mold is made, and herefrom a relief electrotype.

These are line processes.

To reproduce masses, tones, tints, gradations, a way had to be found of disintegrating them, breaking them up into lines or dots, to produce printable plates. Two noteworthy results of experiments in this direction are the half-tone and the photogravure: the first a relief, the second an intaglio process.

By the half-tone process, a glass plate with a network of black lines (several hundred to the inch in fine work) is interposed between the drawing or other object to be photographed and the camera. A sensitized copper plate thus receives an image which is broken up into minute dots, as the light can only penetrate the spaces between the intersections of the lines. The plate is then etched, the acid attacking only those portions which were not struck by the light. The design to be printed is thus left in relief. This is the method generally used for magazine and book illustration where the original drawing is not one of lines absolutely. It necessitates a smooth paper, brittle, perishable and unpleasant to the eye.

The other method is that of the photogravure.

This involves the combination of a gelatine film with a photographic image and an aquatint ground, and is likewise an etching process, resulting in an intaglio plate.

Both the half-tone and photogravure may need retouching. Especially the former, which is low in tone, so that high lights may be scraped out by hand, an operation quite noticeable in the print, the dots being absent in the portions thus scraped.

Photogravure, being an intaglio process, cannot be printed with type, but must be struck off separately on a plate-press, which naturally makes it more expensive. It is essentially a vehicle for the reproduction of paintings.¹

The collotype (phototype, Lichtdruck) is printed directly from a gelatine film which has been exposed under a negative, and through resultant chemical action has acquired the property of receiving printing ink in proportion as light has acted on the negative, that is, accepting ink on the blacks of the image and rejecting it on the whites, like the lithographic stone.

Collotyping, which is a planographic or surfaceprinting process, has been used with special success in making facsimiles of old prints and drawings, of great value for purposes of study, and so well done that it has been found necessary to stamp them "facsimile."

A very compact summary of the principal ones of all these many processes appears in the late S. R. Koehler's catalogue of an exhibition held in the Boston Museum of Fine Arts in 1892. General principles remain the same, although many improvements in matters of detail have been made since then. It is to

As "rotogravure" it is now printed on a cylinder press.

be noted also that there are various names for similar processes, with some resultant confusion of terms.

The advantages of photography itself as a means of keeping comparatively truthful record of architectural monuments, have been accented by Russell Sturgis, who very properly adds that the artistical character is not in the photographic picture, but in the object which it reproduces.

Photography is also the most satisfactory method of reproducing paintings for the student of style and manner. Once, difficulties were offered by the inability of the ordinary camera to render all colors in their exact value in black and white, the blues appearing too pale, yellows too dark. This defect has been corrected by the use of orthochromatic (isochromatic) plates. The importance of such an improvement, in giving a proper photographic translation of a painting, need not be insisted upon.

Efforts to photograph direct in natural colors have culminated, for the present, in the recent invention of Lumière. But for ordinary purposes, the really practical result of many experiments in this field is an indirect one, the application of the three-color principle to half-tone plates. Three negatives are obtained, each of which, by the use of orthochromatic plates and so-called filters, is adjusted for the rays of one of the primary colors. The negatives are made, in the regular way, into half-tone blocks, each one of which shows only that portion of the picture which is to be printed in one of the three colors. Such three- and four-color processes have been used in the reproduction of works of art (paintings, porcelains,

book-bindings), as well as in reproductions of water-color drawings to illustrate modern books of travel. This, of course, is not color-photography, though it has been called so. In fact, it is well to understand clearly the undoubted advantages of these processes as means of producing pictorial documents, as well as their defects and limitations, and not to claim for them, or expect from them, more than they can render. For even then they offer enough to make us thankful, while nursing our optimism in the hope for improvement.

In the development of modern book illustration the photomechanical processes have played a dominant part. The revival of line drawing (reproduced in line) in this field, as against the wash drawing (reproduced in half-tone), is a significant factor in the production of the well-made book. The annual exhibitions of "Fifty books," arranged by the American Institute of Graphic Arts, form an interesting and instructive yearly summary of the progress of book decoration and illustration in this country.

At the end, be it emphasized again that this chapter has no intimate relation to the general subject of this book. The latter is concerned with prints produced by hand work on plates, blocks or stones,—particularly with such work done directly by the originator of the design.

CHAPTER X

COLOR PRINTS

THE desire to produce and to see pictures in color is a natural one. It shows itself even in the primitive attempts of the child who daubs over old woodcuts with the water-colors which have brightened its birthday or Christmas morning. Thackeray, it is said, described the joy which this gave him in his boyhood, and Robert Louis Stevenson, in his volume of "Memories and Portraits," gives charming expression to this childish delight. The title of his essay, "A Penny Plain and Twopence Colored," calls attention to the practice of publishing prints in both uncolored and colored states. Children had professional hand in this work, for Tuer, in his "Forgotten Children's Books," describes how the coloring on such books was done for the publishers by young people in their 'teens, one putting in all the reds, the next all the yellows, and so on.

Coloring by hand has been applied to woodcuts, mezzotint, stipple, etching, aquatint, line engraving and lithography.

But while the practice of hand-coloring has come down to our own time, experiments in color-printing were made from the very first. They extended to every known method of preparing wood blocks, or metal plates, or stones for rendering impressions. There is not one of the reproductive arts dealt with in the preceding chapters to which attempts at color-printing have not been applied, more in one case, less in another. In block-book initials and chiaroscuro prints, in Japanese chromo-xylographs, Baxter-prints and wallpapers, in mezzotints, aquatints and stipple-engravings in color, in experiments of centuries ago to produce accurate copies of paintings and in the most modern efforts to throw a mere suggestion of color into an etched plate, there arises a brilliantly chromatic array of witnesses to the fascination which the art of printing in colors has held for several centuries.

As to the justification of the use of color on æsthetic principles, and the extent to which it may be used in good taste, that is a matter which each one must settle, to some extent, for himself. But, if the color-print be accepted, there are certain limits which will come to be felt instinctively, and these limits once fixed, time will not be wasted on unworthy work, but the best in this field will be chosen. And that will be found to project itself with some distinctness in this peculiar phase of taste in art, which winds like a red thread through the records of all known processes of printing pictures.

While even the period of the *incunabula* (books printed before 1500) was not without its experiments in color-printing, the vast majority of the prints in color were colored by hand at that time. Jost Amman, in 1568, drew what to-day is a valuable record, a series of three pictures showing the designer, the engraver

248

and the colorer at their several tasks. What colorprinting there was, was from wood blocks, and it is through the agency of wood engraving, also, that the more ambitious method known as "camaïeu" or "chiaroscuro" was put into practice. The step from such simple tints to more complicated color-printing was again natural. In the middle of the eighteenth century, John Baptist Jackson, who applied the chiaroscuro method to the production of wallpaper, extended it also to the attempt to imitate objects in their natural colors. This work was continued by W. Savage, whose interesting "Practical Hints on Decorative Printing, with Illustrations Engraved on Wood and Printed in Colors at the Type Press" (1822), contains creditable specimens of his work. In 1835, George Baxter took out a patent on his method of color-printing, which consisted essentially in the application of color printed from wood blocks, to outlines engraved on a copper "key-plate" giving the form. This use of wood blocks to print color over an impression from an etched, engraved or mezzotinted plate was known long before this, but Baxter applied more colors and consequently more blocks.

The most artistic expression in the art of printing in colors from wood blocks came from Japan. Where Baxter's work forms the culmination of the effort to imitate perfection in all details, these Orientals use color with decorative effect primarily. Through them the art of wood engraving, neglected to-day in favor of photographic processes, has in its simplest form, but with the assistance of color, held the atten-

tion of various able artists and has had a far-reaching influence.

During these centuries color-printing from metal plates was separately developed. And in both possible directions, with the use of one plate only, to which all the colors were applied and then impressed on the paper at one printing, and with the use of a plate for each color, the paper receiving impressions successively from them all. In colorprinting from different plates, it is of course necessary that each portion of the engraving is always relatively in the same position on each plate, and that the paper, in the press, always lies in exactly the same place on the plate. This is called register, and proper register is more or less assured by certain marks on the plate. Despite all precautions, faulty register occurs. Its effects are quite apparent in cheap lithographs or Sunday comic supplements.

Early experiments in the sixteenth century include those of Hercules Seghers, who is said to have printed outlines from an etched plate on colors applied by hand to canvas or paper, and Johannes Teyler, who produced delicate landscape, animal and other subjects in one printing. With J. C. Le Blon (1667-1741) we come to more certainty regarding processes. He worked on the principle of three primary colors—yellow, blue and red—making a mezzotint plate for each. In theory, all necessary color combinations could be attained with these three; in practice, the effect was somewhat elusive, for to resolve a painting into its component colors was not so easy a matter. Gautier D'Agoty later added a fourth plate, to

print the design in black and thus give body to the whole. The "three color" principle is applied to-day in photomechanical processes, but there the camera determines what is to appear on each color plate.

In the middle of the eighteenth century, Ploos van Amstel was cleverly imitating the drawings of Dutch and Flemish masters in plates that are somewhat puzzling, but in which signs of aquatint, roulette and other methods can be traced. A number of his plates appear in the volume "Collection d'Imitations de Dessins d'après les principaux Maîtres Hollandais et Flamands." Louis Bonnet, who worked in the crayon manner, imitated pastel drawings, "with complete illusion" we are told, using a plate for each color.

William Blake, that strange genius, stands by himself. Not only because of his originality as a poet and an artist, which has occupied the attention of various biographers and commentators. But also for a technical reason; the other methods of printing from metal plates are intaglio processes, while his is a relief process. The printing is done from lines standing out in relief, not from lines cut into the plate. Blake himself called this method "To Wood-cut on Copper." He wrote the text and drew the designs of his "Songs of Innocence" and other poems on a copper plate, presumably with the stopping-out varnish used by etchers, or some similarly protecting substance. When the plate was then subjected to the action of acid, it remained intact wherever he had written or drawn upon it, while the remainder was bitten away. Thus, text and drawings were etched in relief, and could be printed from. One color was usually applied

for the text and another for the pictures and ornaments, and after printing the whole was tinted by hand. Blake's books are extremely rare to-day, but some will be found in public libraries, and certain ones have been reproduced in facsimile, among them the "Songs of Innocence."

So experiments in color-printing went on, and they have gone on to the present day.

The alliance between color and the photomechanical processes was a natural outcome of the desire to heighten the exactness of reproduction of the camera by adding the final element of color. Some remarkable color reproductions of paintings have already been effected. The usefulness of this coöperation between the camera and color-printing is further demonstrated in various books on porcelain, Oriental rugs and other art objects, which are increasing the possibilities of art instruction through the printed page. And the present-day outpour of English books descriptive of special countries or cities, illustrated in color, from sketches in aquarelle, also indicate both achievements and possibilities in this line.

Color prints had their special day in the eighteenth century. Mezzotints and stipple-engravings frequently appeared in color. Sometimes they are simply printed in one tint, as are occasionally the small bust stipple portraits by Chapman and others, or the anonymous mezzotint portrait of Paul Jones, telescope in hand, which collectors know in a reddish-brown ink. Or they appear in black, with a touch of red, as on cheek and sleeves in J. R. Smith's "Mrs. Robinson" after Romney. This application of color in spots, which seems of questionable taste, just as it does in half-tone plates to-day, may also be done entirely by hand, as in an impression of J. R. Smith's "Mrs. Sneyd as 'Serena,'" shown in New York in 1904, in which sash, cap and face were touched up with color.

The term "printed in colors" is always used with a mental reservation, for a color stipple or mezzotint absolutely untouched by hand is rather rare. The art of color-printing is so complicated, the tricks of inking so many, the blending of colors so delicate an operation and the knowledge of the manner in which a certain color will print under certain conditions so difficult to acquire, that the "personal element" is a strong factor in this operation.

A simple rule to tell color-printing from hand-coloring is this: If the dots or lines show in pure blue or red, or whatever the color may be, the color is printed; if they appear black or brown under the color, then the latter has been supplied by hand. Or, to put it in another way: If the dots and lines are in color, and the spaces between them are white, it is a case of printing; if the spaces are covered over with the same color as the dots or lines, it is hand-work.

Where the stippling is very fine, close examination is necessary to determine this. There is a portrait of R. J. Schimmelpenninck, by L. Portman, a Dutch publication, not a work of high art, but a good, delicate bit of stippling. It is only under a magnifying glass that the tender flesh-tint resolves itself into hand-work, only the bluish background and the brownish frame being printed in color.

Color may raise the question of inferiority of impression, for it was not unusual to cloak the shortcomings of a worn plate by printing it in colors. In fact, the mezzotint plate gave better results in colorprinting after a certain number of impressions in black-and-white had first been struck off. The market is flooded with restrikes and even more with modern reproductions of these eighteenth-century colorprints, known and sold as such, but possible traps for the unwary when in irresponsible hands. Julia Frankau's "Eighteenth Century Color Prints" (1900) is profusely illustrated with very good reproductions of color-prints from metal plates, and there are also some, of both English and French work, in Vol. V. of Lippmann's "Engravings and Woodcuts by Old Masters "1

Lithography accentuates the fact that the grained surface lends itself more readily to detailed application of color, and fairly invites its application. The Germans are bringing the old art of chromo-lithography to its own, and the modern Frenchmen come out with hold realism of color.

"L'Estampe moderne," issued in 1897, with plates by Robbe, Léandre, Fantin-Latour, Mucha, many of them done in lithography, is an outcome of this modern effort. Even more so "L'Estampe originale," brought out four years earlier, with contributions by Toulouse-Lautrec, Ibels, Whistler, Henri Rivière, Lepère, Willette, Lunois, Rodin, in etching, lithography and wood engraving. More or less tinged with opposition to conventions is this and similar work. A stumbling-block to the Philistine, oc-

¹ A work on the subject in general, "Colour Printing and Colour Printers," by R. M. Burch, was published in 1910.

casionally a bit outrageous in its screamed defiance or its exultant whoop, but nearly always with some point of interest, some freshness of view, some novelty of statement.

Whether we are attracted by color in etching or not, we may be quite sure that the thing is to be well tested. The artists whose names are cited in the chapters on etching and lithography have been and are applying that test.

The liking for work in color, as I said at the beginning of this summary review, is a natural one. It has no doubt been expressed at times in a rage for work unworthy of serious attention, silly and weak in conception and execution, touched up into a fictitious semblance of naturalness by a little coloring covering its artificiality. But in more ambitious and conscientious efforts one may find delight, both technical and artistic, in delicate tints applied in good taste. One may even come to the conclusion that it is not so much a matter either of simply indicating slight impressions of color or of giving completeness of effect, but that in either event the thing be well done. In that case justification will be found for both the smooth finish and completeness of a Debucourt or the spots of colorsuggestion in an etching by Raffaëlli or a lithograph by Whistler. And that because, though personal choice will draw you more definitely to the one or the other, you take pleasure in the workmanship of it all, if it be exercised not only for its own glorification.

Adjustment of means to end is an eternal necessity. The medium must be allowed to dictate its limits. The etching cannot be expected to carry the same

amount of completeness in color as the complicated aquatint method of the eighteenth-century Frenchmen, for instance. Keep this in mind. If color-prints attract you, you will indeed still meet the criticism of him who maintains that black-and-white is the proper sphere of the print and its most chaste form of expression, a standpoint from which the present writer has not yet been able to emancipate himself altogether. But you will be exercising your preference on the safe and sane line of appropriateness, an essential test of good taste.

CHAPTER XI

COLLECTING

THE handbooks on prints often lay stress on collecting in their very titles. I have emphasized appreciation. The development of that faculty seemed more important. The collecting habit is sure to assert itself if there is the slightest predisposition.

According to his pocketbook and taste, the amateur may collect the finest specimens of etching (limiting himself, perhaps, to one or two great names, say Rembrandt, or Whistler) or of mezzotint, paying several thousand dollars apiece for some of the rarest. Or he may take up lesser lights, less expensive. He may even follow Hayden's sensible advice and collect old English magazines, such as Once a Week or the Cornhill, for the sake of the wood engravings after Millais, Walker, Sandys, Whistler, Pinwell and others. This hint to the collector of very modest means might well be extended to cover periodicals with wood engravings of the New American School. And if one succeeds in picking up stray back numbers of P. G. Hamerton's Portfolio, or the Revue de l'Art, L'Art, L'Artiste, Zeitschrift für Bildende Kunst, many a pleasing etching or lithograph will be procured. The expense is likely to be very moderate, and the enjoyment great.

Of enjoyment the discriminating collector is always assured. It is said that Hippesly fairly breakfasted on the beauties of Turner's "Liber Studiorum," having a print from this series placed on the chair opposite to him at his meal. Print-collecting in a proper spirit not only trains artistic discrimination, but also enlarges the view of life, and opens up "a world of learning and of pleasure." And it has also been emphasized, as an argument *pro*, that little space is taken up by the ordinary collection, as it can be very compactly placed.

There are, occasionally, eclectic collectors, who acquire fine examples of any of the processes,—the line engraving by Morghen, the lithograph by Whistler, the etching by Haden. But the preference is usually for specialization. Attention is devoted to the particular process, or school, or individual artist, or subject that appeals most to the collector's artistic tastes and other interests. But specialization with a view to relative completeness should not be applied to Dürer or Rembrandt or Whistler, unless there is ability to stand the financial strain involved in the procuring of their rarest and finest prints.

The necessity of a definite plan has been urged by some, in order to avoid being overwhelmed by the mass of a miscellaneous collection acquired haphazard. It is well to go slowly, and to keep one's head in print shop and auction room.

A change of mind should be indulged in frankly, with the courage of conviction, when it occurs.

I heard once of a young clerk who began to develop a taste for etchings, and for a while bought certain large and showy reproductions. In time his eyes were opened, and one day he went to a salesman of the dealer from whom he had been purchasing, and said: "Now, see here. You know I've been on the wrong tack. I don't want these things any more." The upshot was that he returned his purchases to the dealer, who allowed him a fair amount for them on his future acquisitions. His taste had decidedly developed, and he used his not very large surplus to good effect.

The value of prints as investments is frequently dwelt upon. It is undoubted in various cases. But that should not influence us to the extent of making us buy things that we do not care for, because we anticipate that they will hold their values or rise. Buy with judgment always, but let the judgment be artistic first and commercial afterward. If the two coincide, all the better. I knew a collector who, I feel confident, purchased his prints only because they were fine examples of art. When he died, his collection was practically the only asset. But his heirs had no cause for complaint, for the prices which his prints brought in the auction room justified his selection.

Many collectors have been in the habit of writing their names or initials, or stamping the same, or monograms, or devices, on the prints in their possession. Facsimiles of such collectors' marks are given in the books of Fagan, Maberly and Wessely. Some of them are a direct recommendation of a print offered for sale.¹

The would-be collector needs practice. Dependence "Collectors' Marks," by Louis Fagan (1883), reproduces 668 of such marks. A lates work is Frits Lugt's "Les Marques de Collections" (Amsterdam, 1921.)

on a reputable dealer, certainly at first, is to be recommended. And "if in doubt, wait," is a good piece of advice. He will have occasion to refer to various books, many perhaps, in the course of his activity. Manuals specially intended for him have been written by Willshire, Maberly, Whitman, Wessely, Wedmore and others. There are many reference books, which have been noted in the various chapters of the present volume, and the annotated catalogues of exhibitions issued by some dealers are frequently worth preserving.

Some idea of prices is useful. Printed records of sales must be used with some caution, when the items are bare of any information as to the condition of the print. Variations in price between impressions of the same engraving may be recorded without comment. leaving one to guess that they were probably due to difference in condition or state. Lists such as those in J. Herbert Slater's "Engravings and Their Value" (London, 1912), or the Year's Art (London), the American Art Annual (New York), the Connoisseur (which also answers queries as to the value of prints in its "Answers to Correspondents") and the Kunstmarkt (Leipzig), supply to a considerable extent the demand for a record of prices.1 bird's-eye view of present-day prices in the whole field of prints is offered in Gustave Bourcard's "A travers cinq Siècles de Gravures, 1350-1903," which volume also gives much other useful information, such as lists of print-rooms, print dealers, printers and sales, technical terms in English, French and German, the whereabouts of specially noteworthy collections

¹To these should be added G. Bourcard's "La Cote des Estampes" (1912) and "Annuaire des Ventes," by Léo Delteil, 1911 and after, L. Monod's "Le Prix des Estampes," 1920 and after, and "Print Prices Current" (London), 1918 and after.

of prints by certain individual artists, etc. Prices brought by the work of individuals are recorded in monographs on those artists (such as Tuer's on Bartolozzi, Bouchot's on Debucourt), or in books by authors who happened to be interested in the artist in question. Prices paid for Turner's "Liber," for example, are set down in Wedmore's "Fine Prints," and Hardie's "English Colored Books" similarly deals with William Blake. The last-named, like poor Meryon, forms one of the cases which give writers an opportunity to moralize on the irony of fate which permits the works of a man who has lived in poverty to bring high prices after his death.

Good impressions should be sought, but not necessarily rare or early states. Various cases cited in the next chapter show why an early state of a plate, though bringing high prices because rare, may represent an unfinished conception and be æsthetically and technically inferior to the final state of the plate. Or, as it has been punningly expressed, a print may be "rare because not well done."

An example of the opposite case was once cited by a well-known print dealer, who said that he had bought one of the portraits in Van Dyck's "Iconography" in both states, namely, the etching as Van Dyck had left it, and the same with the engraver's burin-work superadded, paying just fourteen hundred times as much for the "unfinished" as for the "finished" print.

Rarity may be due to various causes. The vicissitudes of time may have reduced the number of impressions in existence; an accident to the plate, or

¹ Of course it must always be remembered that prices are a relative conception. The price of a given print may change overnight.

its confiscation by the authorities, may have occurred when only a few proofs had been pulled; the plate may have been privately printed in a limited edition, or its merit may be such that all known impressions are in noted public and private collections, so that one rarely comes into the market.

Collecting may become curiosity-hunting. Rembrandt etched a sleeping dog in a corner of a plate measuring about 41/4 inches by 21/2. He subsequently got rid of the superfluous white space by cutting down the plate to 31/4 x 11/4. But an impression of the first state ("before the plate was cut") had been taken, and that was purchased in 1841 by the British Museum, which gave £120 for it, the excess in price over an impression of the later state being paid for white paper within the plate-mark, as Hamerton says, which Rembrandt considered useless. Whistler's "The Desk" has brought \$450; the fact that only a few impressions were taken is the chief reason why it is prized. In the case of the etched portrait of his mother, of which only one print is known (which has sold for \$1,750), rarity and merit coincide. If financial means permit the acquisition of the rarity, it will at the very least have its distinct value as a contribution to the history of the artist's development. for the ordinary mortal, the safe and sane method is usually to look for the good thing irrespective of rarity or state, the impression from the plate as it was finally adjudged satisfactory by the engraver or etcher himself, usually the first finished state.

Some prints have increased remarkably in price. The collector of mezzotints may well regard with envy the low prices paid by Walpole. Thomas Watson's mezzotint, "Lady Bampfylde" (1779), after Reynolds, which sold for £37 at the Sir John Stuart Hippesly sale at Sotheby's in 1868, has in recent years brought £1,200. It was originally sold at about fifteen shillings for a proof, and, say, five to seven shillings for a print. Another famous mezzotint, J. R. Smith's "Mrs. Carnac," went for £30 at Sotheby's in 1872; in 1901 it brought £1,218. A late proof of the same plate sold for £1,160 in the following year, and I am told that the most recent price for a proof of this engraving is \$6,000. The Sun of New York on August 25, 1907, recorded the sale of a colored impression of Bartolozzi's "Miss Farren, after Lawrence," for \$2,900, and added the statement that Lawrence had received \$500 for the original painting. Rembrandt's "Hundred Guilder Print" has gone up to \$20,000, his "Rembrandt with a Drawn Sabre" has brought £2,000, and the "Burgomaster Six" over \$12,000.

These are high prices, indeed, but they are prices forced up by a strong demand for a limited number of prints by a limited number of men. The field is large and there is much interesting work to be had at much less expense.

We are told that even to-day a collection can be formed on a comparatively small outlay. That is, if you do not insist on limiting yourself to the biggest game, or attaching yourself to a prevalent fad. There is good work to be had, less sought after and therefore less expensive, by the older men as well as the modern. It would be queer indeed if the would-be

collector did not find something to attract him in the wide diversity of individual temperament and national expression unrolling itself as one surveys the long record of production, which is being extended to-day.

A print-collector need not be an antiquarian; etching and engraving and lithography are living arts. There are not a few men to-day working earnestly and cleverly in these fascinating black-and-white methods. They are doing it in your own country, and you have but to look about you to see productions worthy of your notice. Have faith in your appreciation of younger, contemporary artists. That will not prevent you from enjoying the great ones, even though they be beyond the possibilities of your pocketbook.

Whether you collect prints or enjoy them without collecting them, you are sure to become inquisitive as to their make-up. You will wish to have some idea of the way in which they are produced, what "proofs" and "states" are, what "remarque" means, or "counterproof," or "restrike." Such apparently dry details lose their dryness when their consideration has become a second nature, when the eye looks for them. They will be dealt with in the following chapter.

CHAPTER XII

THE MAKING OF PRINTS

To judge a print intelligently, one should have a general idea of the manner in which it was produced. For only on the basis of such knowledge can one see why an etching or engraving or lithograph is what it is, and why it is objectionable to overstep the limits which are fixed by the tools used, and the material on which they are used. Technique has, therefore, been dealt with in each of the preceding chapters devoted to etching, mezzotint, wood engraving and the other processes. There these processes are considered in their artistic expression. But, in handling old prints, a knowledge of certain earmarks is necessary, in order to decide on authenticity and condition. And these outward signs are also the result of the manner in which the print was produced. But it is, so to speak, a matter of the mechanics, rather than of the æsthetics, of production that holds us here. question of how the actual print was produced, of the processes involved, subsequent to the preparation of the block or plate by etching or engraving. formation the present chapter is to give, facts as to the development of the "impression," as the individual print is called, through printing, from the work of the engraver or etcher or lithographer on the material (wood, copper, stone) with the proper tools (graver, etching-needle, lithographic crayon).

All processes of producing prints are based on three methods: the relief, the intaglio and the planographic. In the first the line to be printed from is cut around so as to stand in relief above the surrounding surface. Of this the wood engraving is an example. In the second, the line to hold ink for printing is cut in intaglio, cut into the plate. Such channels to hold ink are the lines in engraving or etching upon copper. The third method is that of the lithographic process, where the lines are practically on the surface of the stone. So there is either a ridge, a furrow or a fatty streak to hold ink.

From these facts one may draw a fairly precise definition of the word print: namely, "an impression in ink or other colored fluid on paper, vellum or other suitable material, from a design incised, or cut in relief, or drawn with fatty substance, upon a hard material (metal, wood or stone)." Singer and Strang's "Etching and Engraving and the Other Methods of Printing Pictures" and Hamerton's "Drawing and Engraving" and "Graphic Arts," are useful guides to details, with pictorial illustrations of the various processes.

There are certain characteristics to guide one in ascertaining by which of the three methods a print has been produced. In an impression from an intaglio plate (engraving, etching) the ink lines stand out in relief upon the paper, and the picture is bounded by an indentation made in the paper by the four sides of the plate, and known as the "plate-mark," which one

does not see on a visiting card because the card is smaller than the plate. In a print from a relief-block (wood engraving) the ink lines lie flat upon the paper, and may even have been pressed slightly into it. In a lithograph (planographic process) there is a certain smoothness of the paper, because it has been scraped evenly against the stone, and the ink has a more grayish tone than in the wood engraving, beside which the quality of the crayon line is a distinct one and almost unmistakable. Line engraving on copper produces clean-cut tapering lines, etched lines are of more uniform thickness and executed with more freedom, the dry-point line is delicate and usually has a velvety black border resulting from the "burr" or ridge of metal thrown up by the point as it cuts into the copper, the modern wood engraving shows white lines on a black ground. Mezzotint and aquatint depend on tones, not on lines, the former being capable of gradual transitions from rich, deep darks to lighter shades (in which latter you can trace the work of the scraper in cross-like markings), while the aquatint has no gradation, but flat tints (of a speckled or crackled effect) of various degrees of strength, often definitely circumscribed and not passing gradually into the next.

I must say frankly that I consider such directions for the identification of printing methods somewhat questionable, on the whole. How can one absolutely tell a novice how to distinguish definitely between a lithograph and a soft-ground etching? Practice does more good than long talking. Even the few hints I have given cannot invariably be applied, for the print

may show no plate-mark because the margins have been cut down, the plate may have been worn so that we cannot feel the lines in relief on the print, the burr may have disappeared or the artist may have used mixed methods. Or a woodcut may be printed in grayish ink, and the "white line" may be imitated on copper, as by C. W. Sherborn in his copy of a woodcut by Thomas Bewick, a remarkable piece of imitation. Practice for the eye is the main guide in the end, and thus one will learn to distinguish between the lines or surfaces produced by the various tools and processes.

Increasing familiarity with prints will enable one also to get an idea of the condition of the printing surface, and of the approximate time in its history, when a given impression was struck off, the "state" of the plate, as it is called.

The words "state" and "proof" often occur, and call for explanation. Their use is not always well-defined. In a general way it may be said that "proof" is usually applied to an impression taken from the plate in the earlier, clearly unfinished stages, while "state" is used to indicate stages of relative completeness. Meryon's "L'Abside de Notre Dame" may serve to illustrate this. Wedmore records the following:

"There are some curious trial proofs, one of which shows nearly half the plate blank.

"First state, before any letters. Sky completed.

"Second state. Underneath, on the left: C. Meryon. del. sculp. mdcccliv; on the right: Imp. Rue neuve St, Etienne-du-Mont 26.

"Third state. Date removed.

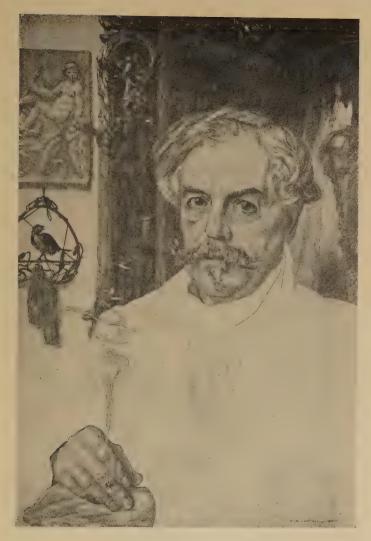
"Fourth state. Remainder of inscription removed, and replaced by: L'Abside de Notre Dame de Paris, 1853, and A. Delatre, Imp. R. St. Jacques, 265."

As the engraver or etcher works on his plate, he takes an impression occasionally, to get the effect of what he has done. Such impressions are known as "trial proofs" or "working proofs." When such proofs of old engravings have been preserved, they may be exceedingly instructive. An impression of Mantegna's "Virgin in Grotto," unfinished, gives an interesting insight into the engraver's method, as do proofs of Dürer's "Adam and Eve," which show that he filled in each portion of his outline to complete finish before going on to the next. And the completest collection extant of wood engravings by F. Juengling includes separate proofs, on scraps of paper, of heads in his "John Brown Going to Execution," after Thomas Hovenden.

The number of trial proofs varies greatly. If five or less are taken of an original etching, the large elaborate reproductive etchings have frequently necessitated considerably more. The progressive stages of such etchings as those by Bracquemond after Meissonier's "Quarrel" or Millet's "Man with the Hoe," can be followed up in a dozen successive proofs.

Sometimes one comes across "counter-proofs," produced by placing an impression just taken, with the ink still fresh, on a sheet of paper and running them through the press. The result is a weaker impression, reversed. Such exist of plates by Jacque

¹ There is an interesting proof, in Dresden, of a Burgkmair block, with sky portions not yet cut away.

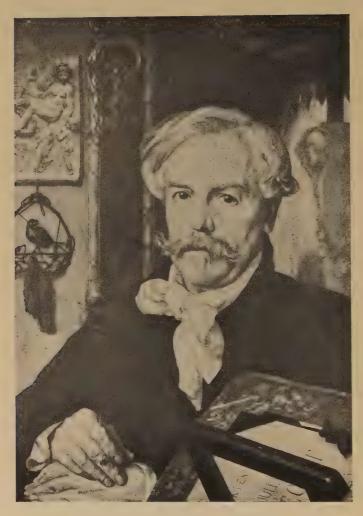


PORTRAIT OF EDMOND DE GONCOURT.

Etching by Félix Bracquemond.

First state.

This plate and the following one illustrate the matter of states, dealt with on page 268.



PORTRAIT OF EDMOND DE GONCOURT.

Etching by Félix Bracquemond.

Seventh state.

and Millet, for instance, and mezzotints are also said to have been proved in this way.¹

Proofs exist which have been touched up by hand to indicate portions which are to be made lighter or darker. A farther element of interest is added when such corrections are made by the painter whose picture is reproduced in the engraving in question, thus showing that the work was done more or less under his supervision. Rubens corrected plates by Vorsterman and others with pencil and white body-color. Reynolds corrected the proofs of the mezzotints executed after his paintings, as did also Lawrence and others. J. M. W. Turner's supervision of the mezzotinters who did his "Liber Studiorum" was constant and thorough. Trial proofs, to be seen in New York, of his "Norham Castle" and "Clyde" in that series have penciled written directions beside the drawn corrections. I have seen similar written notes by D. G. Rossetti on a "touched" proof of a wood engraving by Linton after an illustration by him in the Moxon edition (1858) of Tennyson's "Poems."

Many interesting instances might be cited of changes resulting from corrections, and of the manner in which they are brought about. Buhot's work is full of such examples. Francis Bullard's catalogue of the exhibition of Turner's "Liber Studiorum," at the Boston Museum of Fine Arts in 1904, offers many: e.g., No. 35, "Inverary Pier," "Foul biting in the sky has been partially burnished out, and the marks of the burnisher converted into clouds," or No. 44, "Calm," "Birds are introduced to hide the defective biting of the aquatint in the sky and on the water,"

¹ A counterproof of Dürer (Bartsch 42) in the Berlin print room is remarkably clear. Counterproofs of plates by Rembrandt exist in the Dresden print room and elsewhere.

or, again, No. 66, "Æsacus and Hesperie," "Turner decided to darken the face of Hesperie by covering it with hair, thus making it appear as if the head were turned away from Æsacus." The changes effected during the progress of an engraving have sometimes been considerable. Thus, in this same "Liber" by Turner, No. 70 ("Interior of a Church") passed from daylight to night in its effect, while No. 23 ("The Hindoo Worshipper") went from sunset to dawn. Rembrandt's "Three Crosses" has been frequently cited as an example of complete change, the last state being quite different in composition and effect from the first. In Charles Jacque's "Le Repos" (No. 181) the metamorphosis of the cattle from a flock of sheep, and the wanderings of the shepherd over the scene in the progressive states of the plate, illustrate the possibilities of changing an etching by laying fresh ground and redrawing.

There are many ways of making changes. Work on copper-plates may be obliterated by scraper and burnisher, or the plate may be beaten up from the back on an anvil by a hammer. A portion of a woodblock may be cut out and a plug of wood inserted in its place to be re-engraved. A piece may even be added to an engraved block or plate, and the engraving then enlarged.

Occasionally an etcher will try his point on the margin of the plate, or even execute some slight sketch. Chodowiecki did this; Buhot did it to a very elaborate extent. Such marginal sketches are called "remarques." And from this habit originated the systematic production of "remarque proofs," against

which Whistler directed his fine scorn. But he also declaimed vigorously against the presence of any margin at all. A margin on the plate is not a necessity, but a proper amount of margin on the paper is undoubtedly a protection for a print.

After the various proofs and states there comes. finally, the "finished" or "publication state," preceded by the last proof, passed as ready for printing, bon à tirer or modèle pour le tirage as Jacque used to write on his etchings.1

In modern times, the whole matter of proofs and states was brought into a regular system, impressive to the buyer and profitable to the producer. There may be, for example, successively, trial proofs, finished proof, proof with remarque, artist's proof before all letters (or inscription), state with names of artists only, with inscription in open letters, with letters filled in solid, with the publisher's address. And the states, again, may be on India or Japan paper and on plain paper.2

The elaborate formal lettering on copper engravings, by the way, was generally done by professional writing-engravers.

Printing calls for skill and training, and is an especially delicate operation in the case of etching. There have been some noted printers of etchings in the nineteenth century: Ardail, Salmon, A. Delâtre and F. Goulding. Delâtre printed Whistler's "French Set," Goulding and Mortimer Menpes, himself an etcher, printed other etchings for Whistler, and "Whistler, imp.," the mark of his own printing, appears on many impressions. Motte, Hullmandel,

^{1&}quot; Je déclare le tirage" appears on some of Himely's prints in the Bibliothèque Nationale. The Stuttgart print room has a proof of a wood-engraving Max Weber, after Menzel, on which the latter has penciled: "Zutreden" 'I'm satisfied'),

3" See C. R. Grundy's "How to Distinguish Proof Impressions" (Convoisseur, October, 1910)

Duchatel and Lemercier were known as printers of lithographs.

It is not an uncommon thing for an etcher thus to act as his own printer and get exactly the result he wants. "Drawn, etched, engraved and printed by Francis Seymour Haden, May 11, 1880," appears under that artist's mezzotint, "Harlech Castle." Pennell, Cameron, L. M. Yale, C. F. W. Mielatz, C. H. White, Vanderhoof and many others have worked the press themselves. The professional printer's name in former days often appeared in etched, engraved or lithographed letters on the print. To-day, artists pulling their own proofs generally sign in pencil.

The importance of a good impression is paramount. And the good impression is the result of the printer's skill and the state of the plate.

Early states are generally sought, because the earlier impressions from a plate are naturally better than the later ones, which show signs of wear in the plate. For this reason, also, early states are sought by collectors, but even more, perhaps, because they are rare. For rarity plays a very important part in the collector's list of reasons. In reality, mere priority of state does not mean much in itself. The very fact that the artist thought it necessary to create a later state by making corrections or additions is significant. Such an afterthought may raise a plate from comparative insignificance to telling force, or it may spoil it altogether. Turner's "Calm" (No. 44 of the "Liber") is usually considered much finer in the third state than in the first. The Techener reissue of Jacquemart's "Gemmes et Joyaux" is better than the first state, says Wedmore. In the second state of Whistler's "Kitchen" a large amount of added dry-point work appears, especially on the walls leading to the window, increasing the richness and harmony to a remarkable extent. On the other hand, the luminous quality and reflected light in the first state of Turner's "Crypt of Kirkstall Abbey" have become flat and dull in the second. Some of Meryon's plates have distracting additions in the later states, strange birds and beasts and human beings, emanations of a troubled mind. Nor could any amount of working change the fumbling effect of the body in Whistler's "Becquet" (the 'cello player), in which the interest is absolutely concentrated on the well-wrought head.

There may be various reasons for preferring an early state. Experience, developed taste and acquired knowledge of the individual case will determine your choice.

Ink and paper play their part in the final effect. Ink of a warm, brownish tone was often used for eighteenth-century mezzotints, for which it was particularly suitable. The small stipple bust portraits of the late eighteenth century were often printed in red or brown. Experiments with inks are not infrequently met with, especially in the works of French etchers. Lalauze's half-length of a woman from a drawing by Rembrandt has been printed both in black and in a warmish brown. Early states of his "Curiosité," after Huet, were printed in reddish brown with the ornamental border in black. The step from such experiments to color-printing is a natural one.

Artistic individuality is shown even in the use of paper, the quality of which contributes considerably to the artistic result. Meryon sometimes employed a dull green kind with the best results, and an added weirdness of effect. Buhot, who once spoke of the "intimate affinity of the paper in grain, tone and character with the character of the plate to be printed," tried all sorts of papers, thick and thin, light and dark, grained and smooth, white and toned, even Japanese packing paper. He also occasionally employed sheets treated with some oily substance which is causing them now to crack and break off to the alarm of the owners of etchings printed upon them. Still another stains his paper with walnut juice. are frequently printed on Japanese paper, occasionally on vellum, or parchment, to gain richness of effect. Satin has occasionally been used, but on the whole it lacks the simple nobility of paper. Such æsthetic aberrations as impressions on celluloid are fortunately rare.1

Fenollosa has paid an eloquent tribute to the part played, in the general effect of Japanese prints, by the paper with its "mesh of little pulsing vegetable tentacles."

The paper may also help to fix the approximate date of an undated print, or serve to determine earliness or lateness of impression. This by means of the water-mark, the design which you see in linen paper when you hold it up to the light. These marks designate a factory, and often simply particular quality, for certain ones, such as the foolscap, or the Gothic P, were used at the same period by different

¹ Late impressions of Dürer plates on satin exist. To quote the late Jarq Springer: "Satin was quite usual in the 17th century."

mills. In a recent catalogue of a dealer's exhibition of old German line engravings there appeared again and again, after the titles of the prints, "On paper bearing the water-mark of a snake," or "of a high crown," or "of a coat of arms with a starfish," or "of a Gothic P," emphasizing the importance of this feature. Vol. III. of Sotheby's "Principia Typographica" (1858) gives a list of water-marks, and a number are reproduced also in B. Hausmann's German monograph on Dürer's engravings and drawings (1861). The latest book on this subject is C. M. Briquet's "Les filigranes" (Paris, 1908).

Finally, it may be noted here that the difference in the shrinkage of paper after it has been printed on sometimes causes noteworthy differences in size between various impressions of the same engraving.

The natural desire to save time and money led to economy of means and systematization of labor. One form which effort in this direction took at an early date was that of the migration of wood blocks from one printer's shop to the other, notably in Italy in the late fifteenth and early sixteenth centuries. The same design thus appears in books published in cities far distant from each other, so that it is not always safe to draw conclusions as to the origin of such an engraving from the date and place of publication of the book in which it happens to be found.

The necessity of quickly supplying an increasing demand brought about the establishment of wood engravers' studios or workshops early in the sixteenth century. There was a uniformity of style in the work coming from such an establishment, which was

bound to make itself felt even above the widely different characteristics of the original designs. Similar conditions existed into the second half of the nineteenth century. Noted German engravers ran xylographic establishments in which one man, frequently an apprentice, engraved all the flesh-tints, another all the trees, a third all the skies and so on. The finishing touches were given by the chief of the establishment. It was a sort of factory system of division of labor by specialization. For certain periodical publications, such as *Punch*, production was hastened by cutting up a wood block into squares, each of which was intrusted to a different engraver.

A similar condition of affairs controlled engraving on metal. German engravers of the seventeenth and eighteenth centuries produced incredible numbers of portraits by an organized trade-system, the master executing heads and hands, while clothes and accessories were added by assistants and apprentices. So it was also with the supply of religious pictures from Amsterdam in the sixteenth and seventeenth centuries, and the production of plates was often a family affair. The Victorian engravers in England, and some of the best-known American steel engravers, produced plates by co-operative effort, apparently in order to profit from proficiency of each man in some specialty. J. A. Rolph and R. Hinshelwood executed the preliminary etchings for many of James Smillie's engravings, and the figures in the latter were sometimes engraved by others. In the case of the large plate, "The Capture of Major André," after Durand. this is explicitly stated in the legend: "Figures engd by Alfred Jones. Landscape eng^d by Smillie and Hinshelwood." In London, in the thirties and forties, not a few "galleries of beauties," "gems of engraving" and similar collections of line engravings were "executed under the superintendence of" Charles Heath or Finden.

The step from organized and specialized cooperative production to the business of publishing
was a logical one. Particularly in the records of
eighteenth-century engraving in France and England
do we encounter the names of many engraver-publishers. There were Odieuvre, who employed J. G.
Wille and others in their younger days, and, as Wille
said, "paid very little"; Le Bas, Basan (who wrote
a dictionary of engravers), Mariette (who amassed
a considerable collection of prints) and Boydell, engraver and alderman in London, projector of the
famous "Shakespeare Gallery." Even into the second half of the nineteenth century certain prolific
American makers of portraits on steel were their own
publishers.

On old prints this publishing activity is often indicated by the word *excudit* or *direxit* placed after the name of a well-known engraver. In such cases, the name of the actual engraver is often given as well, but in less important plates it is frequently omitted.

Sometimes a plate has been executed for a private individual, not for publication nor for sale. Such a one is designated a "private plate." Collectors of Americana are familiar with many such, executed especially during 1860-1880.

Mention of the word *excudit* recalls certain terms, and abbreviations of the same, which are met with again and again on old prints. I give a list of these herewith, with their definitions:

Ad vivum indicates that a portrait was done "from life," and not after a painting. (Example: Aug. de St. Aubin al vivum delin. et sculp.)

Aq., aquaf., aquafortis denote the etcher.

D., del., delin., delineavit refer to the draughtsman. Des., desig. refer to the designer.

Direx., Direxit. show direction or superintendence of pupil by master.

Ex., exc., excu., excud., excudit, excudebat indicate the publisher.

F., fe., f^t, fec., fec^t, fecit, fa., fac., fac^t, faciebat indicate by whom the engraving was "made" or executed.

Formis, like excudit, describes the act of publication. *Imp.* indicates the printer.

Inc., inci., incid., incidit, incidebat refer to him who "incised" or engraved the plate.

Inv., invenit, inventor mark the "inventor" or designer of the picture. (Examples: C. N. Cochin fils inv., J. J. Pasquier inv. et sc., Bouchardon inv. del.)

Lith. de does not mean "lithographed by," but "printed by." Lith. de C. Motte, Lith. de Lasteyrie, I. lith. de Delpech refer to lithographic printing establishments.

P., pictor, pingebat, pinx, pinx^t, pinxit show who painted the picture from which the engraving was made.

'S., sc., scul., sculp., sculpsit, sculpebat, sculptor appear after the engraver's name and indicate his work.

One recalls the lines of the poet Flatman, with reference to the engraved portraits by William Faithorne:

"A Faithorne sculpsit is a charm can save From dull oblivion and a gaping grave."

A chapter might be written on signatures. Many of the earlier men are known to us simply by their initials or a pictorial signature: e.g., "Master E. S.," "Master of the Die." Abbreviated signatures are not infrequent: Raph. Sad. for Raphael Sadeler, R. d. Baud for Robert de Baudoux. Initials and monograms are frequent in older work: e.g., "A. D." (Dürer), "H. S. B." (Beham), "H. G." (Goltzius).

Punning signatures there are, too: H. S. and a little shovel stand for Hans Schäuffelein (German for little shovel); Leech signed his lithographs with an apothecary's bottle containing a leech. And there were pseudonyms: Corbutt (Purcell), Paul Pry, Shortshanks and others. Whistler's butterfly is the most familiar instance of a pictorial signature.

The frequent use of initials or monograms has called forth an illuminative literature of its own, the dictionaries of monograms by Brulliot, Duplessis and Bouchot, and Nagler being best known.

An important element in the publication of a plate is the number of good impressions which it is possible to take from it. A copper plate only yields a comparatively limited number of prints before it begins to show signs of wear through the friction of wiping and printing. This possible number may be

yet more reduced by extreme fineness in the engraved line. It is said that Lucas van Leyden's graver stroke was so delicate that fine impressions of his plates are comparatively rare. Formerly, the only remedy for a worn plate was to "retouch" or re-work it, putting new strength into the weakened forms. Israel Van Meckenen was wont to go over his plates as soon as he found signs of wear, but he also re-worked plates by others, and signed them, we are told. H. S. Beham likewise retouched his work carefully, covering up the old lines with fresh work; sometimes he copied the engraving on a new plate. Unfortunately, retouching of old plates was frequently the work, not of the original artist, but of another, with practically always inferior results. Slater points out that the publisher's name is sometimes an index to lateness of impressions, some publishers, whom he names, having been in the habit of buying old plates, having them touched up and then issuing them with their own names added. Mezzotints were especially susceptible to wear, and were sometimes re-worked again and again, color being sometimes applied to the resultant impressions to mask their deficiencies. The demand for the "Liber Veritatis" prints after Claude was considerable, and Boydell, the publisher, had the engraver Earlom retouch them several times. Turner's "Liber Studiorum" plates quickly wore out, and were retouched, mostly by Turner himself, it is believed. "And the consummate skill which he here displayed," says his cataloguer Rawlinson, "was equaled by the consummate ingenuity with which he concealed the fact of the retouches from his purchasers."

With the introduction of steel in the nineteenth century came possibilities of larger editions. And the process known as steel-facing, which consists in putting an infinitesimally thin coating of steel on an engraved or etched copper plate, by means of electro-deposition, makes the plate practically indestructible. Where formerly it yielded only a very small number of good impressions before it became worn, ten thousand impressions, it is said, have been taken from a steel-faced mezzotint plate. For if the steel shows signs of wear, a new layer can be deposited. Whistler's "Thames Set " etchings were originally brought out by Ellis and Green; they were then steel-faced and passed into the hands of the Fine Arts Society. Subsequently they were acquired by a well-known dealer of New York City, who had the steel-facing removed and had some impressions struck off, after which the plates were canceled.

This canceling of the plate usually consists in drawing several heavy lines with the etching needle or graver across the face of it. The object is, of course, to prevent improper use by taking impressions from the worn plate. Impressions from numerous canceled plates by Whistler, Mary Cassatt, Jacque and others exist. Sometimes, as a sort of guarantee of good faith, a set of prints by an artist has been issued with a statement such as that accompanying the Iconophile Society's publications: "One hundred and three impressions taken and plate destroyed" or "and stone canceled." And to furnish proof positive, impressions taken from the canceled plates may even go with a published serie.

Destruction of a plate has been known to be involuntary in the case of Bervic, whom the revolutionary power in France forced to crack the plate of his portrait of Louis XVI. across the middle. The plate was repaired, however, and printed from again.



AN IMPRESSION FROM THE CANCELED PLATE OF WHISTLER'S ETCHING "MILLBANK."

It has happened in some cases that plates or blocks were lost to sight and only came to light much later.

Burgkmair's large woodcut, "The Triumph of Maximilian," turned up in 1777, and in 1796 was published as a complete set. Goya's "Miseries of War" were first issued in complete form in 1863.

Late impressions, we have seen, are not desirable. When they are taken very much later—for instance,

if a portrait plate engraved in the eighteenth century has been printed from fifty or a hundred years later—they are technically referred to as "restrikes." In such late prints from old plates the charm and strength of the work in its original state is pretty sure to be all gone. Various plates by Rembrandt were preserved and printed from in comparatively recent times, sometimes re-worked, new "states" being thereby manufactured. His famous "Christ Healing the Sick" passed into the hands of William Baillie, who touched it up to make it more printable and finally cut it into four pieces, from which impressions were taken. Piranesi's large and fine plates of architectural monuments still exist and are printed from "with sad results," as Russell Sturgis says. Certain unfinished plates in Turner's "Liber Studiorum" (Nos. 73, 74, 75, 81, 82) were sold and impressions taken. Worn-out impressions of "Fulham," says Drake in his catalogue of Haden's etchings, were sold in Paris without the artist's sanction.

The use of old plates has led to fraudulent practices. The activity of the forger is wide and varied, in fact, and is applied to plates as well as to defective or weak prints, for either can be "doctored." "Restrikes" are printed on old paper, or the paper is dipped into a solution of tobacco juice or other liquid to give it the appearance of age. Old handwriting and ink are simulated in lying dates written on the margin. Weak impressions are worked up with pen and ink, and missing portions similarly supplied. Changes may be made by manipulation in printing. Rare impressions exist of Rembrandt's portrait of himself and his wife (No.

19 in Bartsch's catalogue), in which the latter is replaced by the artist's portrait of his mother (Bartsch 349), a quite different plate. The place had been covered with paper, so as not to print, and an impression of plate No. 340 was then taken on the vacant place. False proofs are made in various ways. The inscription on the plate may be filled with a composition so as not to print. Or a lettered impression is turned into a proof by trimming off the margin, splitting the paper and adding false margin and platemark. Or a slip of paper is laid over the inscription on the plate, when printing.1 This latter method, it appears, does not mean that the intention was fraudulent and the impression poor in every such case. Whitman points out, for example, that in the case of Charles Turner, the mezzotinter, such "masked proofs" are nearly all fine impressions. Fraudulent proofs are furnished with remarques, as in the case of Chodowiecki; in fact, Wessely asserted that there was at one time in Berlin a regular factory for forged states of the plates of that artist and of Rembrandt.

Collectors' marks, written or stamped, and watermarks in the paper, have likewise been objects of the forger's zeal.

Color-prints have long proved a profitable field for the "manipulator." "Wholesale forgery of English color-prints in Holland" is said to have existed in 1819, and to-day "color fakes" seem to be plentiful.

"Ways that are dark and tricks that are vain" have not been entirely unknown to the maker of prints!

Various authors, among whom Tuer in his work

 $^{^{1}\,\}mathrm{Early}\,\mathrm{Van}\,\mathrm{Dyck}$ proofs, for example, were thus produced, as A. M. Hind tells us.

on Bartolozzi and J. H. Slater, in "Engravings and Their Value," give interesting information in regard to this matter of tampering with old plates and prints. Tuer even has a chapter on "Modern Reprints of Worn-out Plates and How to Distinguish," this referring to stipple engravings.

The not entirely unrelated subject of fictitious portraits and similar apocryphal productions is touched on in Chapter XIV.

Copies will rarely deceive the expert, but they may prove traps for the novice, who should therefore see to it that he is properly advisd. Generally, the copies made of engravings or etchings by artists of former days are known and are described in the printed catalogues of their works. It must not be supposed that such copies were all made with intent to deceive. Flameng's marvelously spirited and truthful copies of Rembrandt's etchings were executed as illustrations for a book on that artist. Rembrandt's genius caused a number of etchers to either copy his work outright or imitate his style. I have seen a "hitherto unknown Rembrandt" which proved to be simply by Norblin, who had in truth signed Rembrandt's name to the etching, but whose work was neither a copy nor slavish enough in imitation to convey doubt. The owner was simply over-optimistic, as was the honest old soul who possessed an exceptionally fine Dürer print which had been in his scrap-book for thirty years,—so he said, and he believed it, too. But his memory played him false, for the picture was a reproduction (photomechanical, if I remember right) of a more recent date than that.

But all cases are not so easily cleared up. A number of years ago a Western collector paid \$1,500 for an impression of Rembrandt's famous etching "The Three Trees," sold to him in perfect good faith by a bookseller. It turned out to be a copy by Tames Bretherton, marvelously near to being identical with the original, line for line. It is betrayed only by the slightest of signs, a certain timidity of handling in the upper right-hand corner, where the long boundary line under the clouds is interrupted near the margin. and where the four lines coming to two points do not come as close to the margin as in the original. At the sale of the Westerner's collection this same print brought \$4, and it is in private hands in New York to-day. Middleton's catalogue of Rembrandt's etchings has illustrations showing points of difference in detail between certain etchings and copies of the same.

Copying of the work of successful artists began at an early date and continues. Marc Antonio Raimondi copied a considerable number of Dürer's plates, particularly the woodcuts of the "Little Passion," which he reproduced on copper. Dürer complained bitterly of the thefts of his compositions. Gosselin, of Paris, has shown versatility in clever copies of etchings by Meryon, some of them signed E. G., and of the portrait of Franklin, in color, by Alix after Van Loo.

An interesting study is that of altered plates. The substituting of one head for another in a plate may have taken place for various reasons. There may have been a demand for a portrait of a momentary

celebrity which was supplied by taking the plate of an existing portrait of someone else, erasing the head and substituting the desired one. Or some change in the appearance of a public man (growth of a beard, marks of age) may have necessitated an erasure and re-engraving of the head on an older portrait of the same man. An equestrian portrait engraved by Pierre Lombart, a made-up composition after Vandyck, reflects the changes of political opinion in England in the days of the Revolution and the Commonwealth. In the third state of this plate the personage depicted has the head of Cromwell, in the fourth the head of Charles I. has been substituted, in the fifth, another, older head of Cromwell has taken the place of that of Charles I. The various states of this portrait have been reproduced in Alfred Whitman's "Print Collector's Handbook" and elsewhere. A. H. Ritchie's full-length portrait of Lincoln was originally one of Calhoun, the head having been changed, and the title "Jefferson's Works," on some volumes on a table, erased. Such cases might easily be multiplied.

The case of the palimpsest, that is the manuscript written on parchment from which former writing has been erased, has its counterpart in engraving. The "Heilige Maria von Einsiedeln," by the "Master E. S. of 1466," was cleaned off the plate and a young warrior engraved over it by another.¹ Reproductions of both are given in the publications of the International Chalcographical Society for 1887. Occasionally an etching will be seen which shows faint traces of former work on the plate, as in Jacque's "Effet de

¹ There is an impression of this in the Bibliothèque Nationale, Paris. G. S. Layard has two chapters on "Palimpsest plates" in his book on "Suppressed plates" (London, 1907).

Lumière" (No. 324 in Guiffrey's catalogue of his

etchings).

I know well that this chapter consists of somewhat fragmentary information. But a few instances serve the purpose as well as a whole bookful. That purpose is the fixing of certain general facts as to the manner in which prints are made, legitimately and illegitimately. To try to describe all possible contingencies would be like expecting a student to go through a text-book at the first lesson with like result. The guidepost is a comfort, and as such this chapter may perhaps serve to strengthen the reader's judicious self-confidence and urge him to continue personal research in whatever specialty particularly appeals to him. God helps him who helps himself.

CHAPTER XIII

THE CARE AND ARRANGEMENT OF PRINTS

THE print is a more or less delicate object. The law-written or unwritten-of a public print-room includes paragraphs restricting handling, which are equally applicable in private collections. The surface of a print should not be touched, for the action may cause damage which it is impossible or difficult to make good even partially. It is a common offense, when looking over a lot of prints, to drag one across the face of the one below it, scraping the hard corner of a cardboard mount over the delicate bloom of a mezzotint, for instance. An equally bad practice is the quite general one of holding a print with one hand, between forefinger and thumb, the latter usually leaving its indenting mark. "As a collector," said Beraldi, speaking of Meissonier's painting "L'Amateur d'Estampes" (The Print Lover), "I have always felt deep pain in seeing the manner in which Meissonier's 'Amateur' keeps his prints. What disorder! What little care! . . . I see indelible breaks and folds, thumb-marks. Oh, the poor proofs!" Beraldi might have found even more striking pictorial illustrations of "how not to do it." For instance. Reynolds's "Portrait of Two Gentlemen," grasping a print at opposite ends and pulling it taut, or Kneller's

portrait of John Smith, the mezzotinter, holding a print rolled up.

As to the repairing and cleaning of prints, unless one has made thorough and numerous experiments, it is best to leave all but the simplest jobs to those that make a business of it. Bonnardot, in his "Essai sur l'Art de restaurer les Estampes et les Livres" (2d edition, 1858) gives many recipes, but he and other authors recommend great caution in the use of strong chemicals, and lay most stress on simple remedies, such as are given by Slater in Chapter VI. of his "Engravings and Their Value." For slight cleaning, or for straightening out a creased or crumpled print, however, a cold-water bath can be applied without danger in most cases. The print is laid face downward in water in a flat dish large enough to permit the print to float without touching the edges of the dish. It is allowed to soak thoroughly, for from fifteen minutes to an hour or two, according to the needs of the case and the texture of the paper. Then it is lifted by grasping it carefully at the two corners of one end and the water is allowed to run off. After this the print is dropped on a clean sheet of white blotting paper and another similar sheet is placed over it. Moderate pressure is exerted, and the operation is repeated with other blotters, if necessary, until superfluous moisture is absorbed. Then the print is placed between two clean blotters and left under pressure (some heavy books of the right size will do well) over night.

Note that fresh air is necessary to keep a print in healthy condition.

¹A later book is M. J. Gunn's "Print Restoration and Picture Cleaning" (1911), but it does not change conditions indicated above.

It is well to protect prints by mounting them on sheets of cardboard. There have been various ways of doing this: the print may be "laid down"—that is, pasted entirely on the mount—or it may be pasted all along the edges of the four sides, or tipped at the four corners. But the best way is to use a hinge of light but tough Japan paper, one side of the hinge being pasted to the back of the upper or left-hand edge of the print and the other to the mount. In this manner the print is attached to the mount by one side only, and can be raised (like an upward opening trap-door) for the purpose of examining the back for water-marks, marks of former owners, notes, or for any other purpose. The hinge may extend along the entire side of the print, or two hinges may be used, some distance apart, and each about an inch long. The late Friedrich Lippmann of Berlin had the prints in his care hinged on two adjoining sides, so that they could not be raised. Over the print thus mounted there is placed a second sheet of cardboard of the same size as the mount. (Familiar sizes are 14 x 18, 22 x 28, 28 x 40.) Into this upper board or mat an opening is cut somewhat larger than the printed portion of the print. As the latter thus lies at the bottom of this opening, it is obviously protected in a measure. Furthermore, the uncut portion of the mat rests upon the margin of the print, and thus holds down the latter in place. Sometimes mat and mount are fastened together on all four sides, forming what is known as a "sunk mount." Usually, however, they are simply joined along one side by a strip of adhesive tape, tracing linen or the like, which forms

a hinge on which they can be opened like the leaves of a book.

For examination by artificial light, an adjustable lamp sliding on a perpendicular movable rod with a base, and provided with a reflector, is used.

Prints are usually kept in portfolios or solander cases, the latter being boxes with the top hinged to swing up like the cover of a book, and the fore-edge hinged to swing down, so that the prints can be drawn out at the side or lifted out at the top. In various public collections, portfolios standing upright are used on account of economy of space and greater accessibility. I know of one collector who devoted a whole room to his prints, which he keeps unmounted, standing on end in large wooden cases, such as are seen in print-dealers' shops, with the front so adjusted that it can be made to drop outward. Large prints may be placed in cases of drawers, which latter, when pulled out a certain distance, tilt downward at an angle convenient both for looking at the prints (which are turned over almost like the leaves of a book) and for removing any that it may be desired to take out.

Instructions as to arrangement (that is, classification) are very apt to be aimed at the big collector, not at the small one, whose opportunities and finances enable him to acquire but a few plates by one man. If you have a small collection, do not trouble your head much about arrangement. If you have been able to get a fairly complete representation of some individual artist, you will probably arrange the prints chronologically (a very common method, as it best illustrates

the artist's development) or by subjects, as has been done by some cataloguers of Rembrandt's etchings. By that time your study of the artist and of the literature dealing with him will have put you in a position to arrive at your own conclusion as to the best course in that particular case. Public collections may have an arrangement according to the process or medium (i.e., line engraving, etching, lithography, wood engraving), or by schools of engraving (or nationality), or by individual artists, or by a combination of two or all three of these methods.

Useful information regarding the care of prints is given in W. H. Willshire's "Introduction to the Study and Collection of Ancient Prints" (1874), J. Maberly's "Print Collector, Edited by Robert Hoe" (1880), Tuer's "Bartolozzi," Davenport's volume on mezzotints, J. E. Wessely's "Anleitung zur Kenntnlss und zum Sammeln der Werke des Kunstdrucks" (1876) and Alfred Whitman's "Print Collector's Handbook" (1901). A later book is H. W. Singer's "Handbuch für Kupferstichsammler" (1923), quite detailed in information.

But the general hints given in the present chapter will probably be found to cover questions which will ordinarily occur.

CHAPTER XIV

THE SUBJECT-INTEREST

WRITERS on prints usually view them from the æsthetic standpoint, and overlook the utilitarian. Or, if this last word seems harsh, let us say—perhaps more correctly, too-that the subject-interest in the print is not always accentuated as it might be. The artistic interest is paramount. The finest examples of engraving, of etching, of lithography are collected as such by private individuals and in public print-rooms. But the print has also a strong subject interest. And there is this further advantage that the print, not being a unique production like the painting or statue, can have a greater circulation and reach a larger public. It emphasizes the fact that all art works form material for social history. They serve to illustrate the history of mankind in its different phases and various surroundings. Thus, Muther says (in his "History of Painting"), speaking of the Florentine painters: "In these works . . . the whole epoch with its people, costumes, arms and utensils, dwelling rooms and buildings, lives on as in a great picturebook of the history of civilization."

This subject-interest is found more or less in all prints. It exists, even though in the slightest form and incidentally, in the finest products of art, which

may at first sight appear to have none but an artistic appeal. And it is of the first importance in many prints of which the artistic value is less. The manifold activity of mankind, which makes up what we call social history, is mirrored in the print. The individual is illustrated in portraits, national characteristics in pictures of costume and customs, events in national and international life are dealt with in historical pictures, the interest in locality is served in views. As has been said, even prints treasured and admired primarily for their art interest still have this secondary value to a greater or lesser degree. Meryon's weird etchings have perpetuated a Paris that has gone, swept away by the leveling hand of Baron Haussmann: Whistler held London's water-front in "Black Lion Wharf" and others of the "Thames Series"; Joseph Pennell presents the architectural aspect of Spain, Holland and New York: Marcelin Desboutin has set down the features of noted literary and artistic contemporaries among his compatriots; Rochebrune and Brunet-Debaines have pictured the architectural beauties of France; Jacquemart's etching needle was employed in exquisite delineations of book-bindings, glassware and jewelry. Charlet and Raffet give us pictorial commentaries on the Napoleonic legend in their spirited lithographs; Moreau le jeune, while illustrating Rousseau, left invaluable records of French costume of the eighteenth century; Menzel has noted the uniforms of the soldiers of Frederick the Great to the minutest details of buttons and trimmings; the intensely summary and decorative Japanese chromo-xylograph brings before us, with many delightful touches, the life in the land of the holy mountain, Fujiyama. When artists such as Dürer, Schongauer, Goltzius or Lucas van Leyden applied their technical power and conscientious study of their surroundings to the delineation of Biblical scenes, they produced a most interesting view of types, costumes and customs of their age. One may emphasize this point by instancing individual prints such as Dürer's "Prodigal Son" (with its picture of a barnyard of the artist's time) or his delightful "Jerome in His Study" (full of the detail of an old German interior), or van Meckenen's "St. Matthew" (an amusingly quaint personage); but they are simply a few among many. Or we find the artist frankly reproducing the life about him without placing his types before a historical or legendary or Biblical background. The Dutch country scenes of Van Ostade, De Bry's "Village Festival," Dusart's "Country Fair," Callot's "Miseries and Misfortunes of War" fairly pulsate with that interest which enlists our sympathies because it is human and is presented with sympathetic understanding. It is this interest which accounts for the popularity of genre scenes by such modern painters as Knaus, Vautier, Defregger, the archæologizing canvases of Alma Tadema and Gérôme, the detailed studies of Meissonier-whose work has been much reproduced by talented etchers,the military records of De Neuville and of Detaille, who never characterized German troopers more truthfully than in some of his lithographs. Intimate character studies are brought before us in the form of

portraits by masters such as Nanteuil, Masson, Edelinck, Drevet or Aldegrever. The very artistic excellence of such work strengthens its interest and value from the present point of view.

Famous paintings are brought before a larger public through sympathetic translations into black-andwhite by Chauvel, Unger, Waltner, Feckert, Flameng, Rajon and others. The Wagner enthusiast can find artistic interpretations of the master's music by Fantin-Latour and Egusquiza. Nor should the caricaturists be forgotten. Gillray, Cruikshank, Daumier, Gavarni, Nast and so many others have commented upon the foibles of their fellow-beings and flaved wrongdoers. In caricatures the life of a people is mirrored with an insistence on its salient points which brings out its weakness and its strength. Changes and vagaries in costume and customs, colloquialisms, fads, amusements, the characteristics of classes, types or professions, all that makes up the life of the passing day, are illustrated and emphasized by the point of the joke or the grotesque distortion of the picture. The possibilities of usefulness as material for history, inherent in the caricature, are those of the chronicle of current events and extend far beyond its original purpose. Thomas Wright, John Ashton, Jullien, John Grand-Carteret have shown this in their richly illustrated books.

So, as we review the many names of artists who have worked in etching, engraving or the other processes by which prints are produced, or whose works have been reproduced by those processes, we find that each in his day and special field has added

his share to the material for the study of that everinteresting subject—humanity.

This material must be used with critical discrimination. Uncritical dependence on the print to illustrate a historical figure or occurrence is as wrong as an implicit trust in a statement, because it happens to be printed. Yet illustrations are published in books with no expression of doubt as to the authenticity of the originals on which they are based, apparently for the simple reason that the original was an "old print," which term is so loosely applied that it is made to cover equally an engraving two hundred years old and one that has not seen half a century.

Henry Hudson looks out gravely on the world, from his big ruff, on many a printed page, but where is the portrait painted during his life on which all these pictures are based? As Artemus Ward said, "Echo answers." The contemporary witness appeals to us with the force of a court of last resort. Yet some years ago a mural painter pointed out to me glaring errors in the four famous copper-plate engravings of the engagements at Concord and Lexington, executed by Amos Doolittle, who lived at the time, and visited the places to study them before executing his plates. In the collection of the late Paul Leicester Ford and his brother Worthington C., there was a little group of five woodcut portraits, of the eighteenth century, all in profile, all with cocked hats. Those of Samuel Adams, Bradley and Henry Lee were impressions from the same block, with different names printed underneath. Those of Columbus (!) and Richard Howel were other engravings, apparently

from the same original. In a spirit of grave pleasantry they had been gathered in one frame, and they made one think of Rip Van Winkle's return after his long sleep, when he found the same figure on the tavern sign, but the name "George III." replaced by "George Washington." Among the plates engraved by Paul Revere (of the famous ride) there is a portrait of Benjamin Church, which was simply changed from one of the poet Churchill, I am told. And an engraving of the Wilson portrait of Franklin repeatedly did service for Roger Williams, despite the anachronism of costume and wig.

The older a print is, the more reverential awe is it apt to inspire. Yet the "fake" existed even in the early days of wood engraving. In the famous Nuremberg Chronicle, published in 1493, the same cut does duty on various pages for a view of quite different cities, and among the numerous portraits certain ones bob up repeatedly, each time with a different name tagged on. As Woodberry and Lippmann very euphemistically express it, these views were "typical" rather than individual, they resembled "conventional symbols." Nor is the "fake" unknown in half-tone reproduction of the photograph, for the camera will truthfully reproduce what is set before it. The evidence must be sifted.

The print made useful is of distinct value to those carrying on research in special lines. And the fact that prints can serve such distinctly useful ends apart from purely æsthetic considerations, while it benefits a larger public, does not detract in the slightest from their value to the connoisseur.

This varied usefulness and interest of the print also broadens the field of the collector. Hence we find that artistic qualities in a print are not the only things that make it sought after. Beside the enthusiastic collector of Whistlers, Rembrandts, Hadens, there are those who acquire prints for their subject interest, with just as keen an enjoyment in running down the rarity or the unique impression. Specialties are developed. One aims at as complete as possible a lot of portraits of Washington, or Franklin, or Napoleon; another acquires theatrical portraits and scenes; methods of transportation on land and water are of absorbing interest to still another; one has collected and delved to the extent of making himself an expert on uniforms of the American revolution; Lipperheide amassed a remarkable lot of pictures of costume; Sir Augustus Wollaston Franks brought together a collection of seventy thousand English and American book-plates, bequeathed to the British Museum.

This particular trend of collectorship has produced also the "Grangerizer," or "extra-illustrator," about whom D. M. Treadwell wrote his "Monograph on Privately Illustrated Books" (1892). The method of illustrating a book by inserting appropriate prints from all possible sources was stimulated by the Rev. James Granger's "Biographical History of England" (1769), issued for the express purpose of being illustrated by portraits. By this practice a book may be "extended" to several volumes. Dr. T. Addis Emmet, W. L. Andrews, E. A. Duyckinck, S. J. Tilden, Augustin Daly are among Americans identified with this form of collecting.

I know very well that the phase of collecting activity dealt with in this chapter is not usually regarded by writers on prints. Yet it has its justification as well as that which is based on æsthetic principles. Furthermore, it results in the assured preservation of very much valuable material that would be quite overlooked if we all placed ourselves on the purely artistic basis and from this standpoint shut out of our view all but a few of the greatest artists.

There are many men and many minds. There should be a free unfolding and development of the individual temperament and taste. If we only remember that development implies self-training. The restrictions of complacent ignorance are as depressing to the sight as the narrowness of prejudiced preciosity.

CHAPTER XV

SOME SPECIALTIES

THE practical side of the specialty has been touched upon in the preceding chapter. But it is to be viewed also from the artistic standpoint.

For example, while the interest of personality cannot be entirely eliminated from our consideration of portraits, a selection of the same may be made on grounds primarily æsthetic, to the extent of choosing only those which are really noteworthy specimens of the arts of reproduction. The varied interest of portraiture is heightened by the artist's point of view. Rembrandt, Dürer, the eighteenth-century masters of line engraving in France, Déveria, Legros, Desboutin, Veth, artists of different lands and times, have given us portraits in which force and originality in technique and artistic effect are joined to sympathetic insight into, and disclosure of, personality. The portraits of Edmond de Goncourt by Bracquemond, Darwin by Rajon and Wagner by Egusquiza may serve as three among many typical examples of modern work answering the requirements indicated. The elements involved in portraiture are complex. mood of the sitter, his interest in or sympathy with the artist, the artist's response to the mental attitude of the sitter and his ability to give an intimate analysis

of his individuality, these are factors which essentially influence the final result. When various artists of ability portray the same person, we have the added interest of a study of personality as it impressed different minds. An obvious illustration is found in the portraits of Whistler, both in oils and in black and white, by Fantin-Latour, Menpes, Way, Chase, Nicholson, Pellegrini, Boldini and Whistler himself. We are concerned not only with correctness of detail in the presentation of features. They may be put down with no soul behind them. The superficial recording of a few evident signs of character does not constitute proof of the gift of insight. Mechanical exactitude may mislead, and the camera even may reproduce the person in attitude or expression false to himself. The personality of the artist counts in portraiture as in every form of art.

The spirit of specialization has been directed into numerous paths beside those indicated at various places in the present book, particularly in the chapters on "Collecting" and "Subject-Interest."

Among the various classes of prints which have formed special objects of study and of the collecting instinct, two have assumed proportions of noteworthy importance, the book-plate and the poster, the smallest and largest forms of prints.

The cult of the book-plate has become widespread. Once simply a mark of ownership to be inserted in a book, it has become also an object sought for itself, desired by collectors and exchanged by the owner for other *ex-libris*.

A large and growing literature exists which deals

with this particular form of the collector's activity, and which includes general manuals such as those by W. J. Hardy, Z. A. Dixson, C. D. Allen, as well as books on *ex-libris* in particular countries, or of a particular kind—for instance, book-plates by women. Periodicals in various countries are devoted to it, as are the ex-libris societies which have been formed. Very large private collections exist, some comprising twenty, thirty or forty thousand pieces, and there are even larger public ones, notably that in the British Museum. Exhibitions of book-plates have been held, as a matter of course.

In the earlier days of its history, which covers over four centuries, the importance of heraldry was strongly reflected in the book-plate, which appeared in the brave pomp and dignity of armorial bearings, a feature which held its own through the eighteenth century. At the same time, certain types were developed, some of which left the impress of their predominance on whole periods. Such are, for example, the Jacobean, the Ribbon and Wreath, the Allegorical and finally the Pictorial. The last has again its subdivisions: there is the book-pile plate, the library interior, the portrait, the biographical, the landscape and so on.

These pictorial plates, widely used to-day, afford much play to idiosyncracy. The personality of the owner is apparent in pictorial reflection of his tastes, his studies, his hobbies, his surroundings. The most obvious expression of the *ego* is of course the portrait, which sometimes takes the form of a full-length among the books of the library. More frequently,

however, the personal inclination, or the mental bent, is indicated in frank illustration or by allegorical allusion. Books are depicted with the names of preferred authors prominently displayed on the back, or the paraphernalia of the favorite sport or other hobby to which the person in question is particularly addicted.

Most pleasing, most successful artistically, are those plates in which the individuality of the owner is expressed symbolically in an unobtrusive way.

Possibilities for the display of poor taste are plentiful. An apparent anxiety to remove all suspicion of a light bushel-covered contrary to Scripture leads some to have their ex-libris overloaded with allusions to personal character and achievement, with parade of cheap learning. The book-plate should not say too much. It is sometimes pitiful to see how the designer has been hampered and handicapped by complacent vanity straddling his freedom of expression as the Old Man of the Sea did Sindbad the Sailor.

It is also conceivable that unfortunate results may be caused by artistic vagaries, the desire to make the poor book-plate fill the function of,—a mural painting, if you please, or any other inappropriate form of art, or the attempt to give expression to some ultra-revolutionary æsthetic theories, without regard to the prime object that should be kept in view.

It is not necessary to spoil the appetite by looking at poor things, when so many appropriate and inoffensive outlooks on personality are offered. Occasionally a particularly striking or amusingly pat design or motto comes to view. The book-plate of a noted American comedian, representing a court jester, unmindful of fleeting time, lost in bookish delights amid old volumes. The simple outline design adapted from an Italian woodcut, adopted by an American editor of Vasari's "Lives." Or the Je l'ai ("I have it"), entwining a book on Bracquemond's plate for A. Poulet-Malassis, the exultant exclamation of the bibliophile gloating over a "find." And the London "'Arriet," glancing side-long out of the design made by W. Nicholson for Phil May, who held her vulgar rakishness so well in the pages of Punch.

The list of artists who have designed book-plates which are appropriate and give satisfaction to the eye is a long one. Mention of a few will suffice to indicate the great variety in artistic style and mood and originality which has been enlisted in this very special branch of the designer's activity. Dürer, Amman, Faithorne, Bartolozzi, Strange, Morghen, Eisen, Chodowiecki, Bewick, Revere, Bouvenne, Bracquemond, Rassenfosse, Thoma, Doepler, Greiner, Sattler, Orlik, Walter Crane, D. Y. Cameron, D. McN. Stauffer, G. W. Edwards, E. H. Garrett and such as are known mainly or altogether by their productions in this field: C. W. Sherborn, the late E. D. French, J. W. Spenceley, W. F. Hopson, Jay Chambers, W. M. Stone. A list of this kind evokes a remarkable array of varied art influences, national and personal; of methods and reproductive processes; of artistic individuality directed occasionally, with freshness of view, to this form of art; of the specialized talent devoted entirely to it, with intelligent adaptation of means to purpose. There is much activity to-day in the designing of book-plates, with a range of styles from the classic serenity of a Sherborn or French to the grace and wit of some of the Frenchmen or the vigorous modernity of certain Germans.

Such principles of taste as apply in the consideration of all prints hold good here as well. The question of appropriateness, in conception and design, to the end in view, must be met here as elsewhere. Conducted in such a spirit, the study of the book-plate will both stimulate the imagination by mental association with men of thought and action, and whet the taste by the contemplation of artistic talent applied to a very definite object.

The poster was first raised to the dignity of a form of art in France. The posting of written or printed announcements on walls and other places is an old practice. After the advent of wood engraving the aid of the picture was called in to lend force to the text. The wood-block remained the medium for this purpose until late in the nineteenth century, when lithography took its place.

Jules Chéret's name is prominently identified with the change in method which made it possible for the lithographic stone to give more in this field than the uninteresting average of commercial expression. By simplifying the color scheme he both reduced the number of printings and produced striking effects. These latter he enhanced by simplicity of design, born of a command of line, and a peculiarly lively swing ("galloping composition," someone has called it), a characteristic French flavor pervading it all. This artistic virtuosity was exercised in the fulfillment of

the poster's purpose. His designs are intended to be seen at a distance, and to tell their story forcibly, clearly and immediately. They constitute perhaps the most effective artistic response to this demand. Grasset and other Frenchmen have worked with more or less success in a branch of art to which books such as "L'Affiche Illustrée," "Les Maîtres de l'Affiche," "The Book of the Poster," and the periodical "The Poster" are devoted.

This movement made itself felt also in England, where the poster for Wilkie's "Woman in White," by Fred Walker, is a sort of classic, and where Dudley Hardy, Tom Browne and others have shown snap and a proper regard for the end in view, the power to arrest attention.

Not quite so simple and direct, although eminently decorative, is the work of Mucha and Louis Rhead.

The want of the "poster quality" is one that may nullify the force of the most artistic design. Some beautiful work has been accomplished in Germany and other European countries, for instance, but not all of it has been free from the fault of non-adaptation of means to end. If design or color is too involved, if the artist tries to say too much within the space accorded him, or if the lettering is all too ornate, or too small, or hidden among pictorial intricacies, the object of the poster is missed. A poster is an advertisement, and bound by certain practical rules. It should attract primarily, and should do so even though, being executed artistically, it attract attractively. The point is, to strike the eye, and plainness, distinctness is therefore a desideratum.

In the United States such a poster as the one by Arthur W. Dow for Modern Art, a landscape in simple flat tints, with plain lettering, carries out its purpose with artistic discretion. Some of the monthly magazines have occasionally been similarly appropriately advertised. By business houses this form of advertisement has not been utilized as in Paris and elsewhere. And in the most frequently seen example, the theatrical poster, we have generally the choice between a melodramatic picture of a scene in the play, or of an exhibit of lettering only. In the exceptional case, when an artist such as Haskell or Ivanowski draws on stone a head of an actress, say Mrs. Fiske, the unusually free quality of the work strikes the beholder, and therefore attracts attention, but there is no further attempt to express the poster idea.

In adaptation of manner and composition to the object in view, some of the artists of the Künstlerbund of Karlsruhe, working in the modern German spirit of the universal applicability of art ideals, have shown a happy hand in their designs for labels on tin cans, advertising cards and the like. They use few colors, simple effects and appropriateness of conception and arrangement with an artistic effectiveness which causes lively regret when one recalls the commonplace affairs usually seen. Walter von zur Westen's fully illustrated "Reklamekunst" ("art of the ad") is an interesting guide to this form of art.

The art of the small is exemplified also in cards of invitation, business cards, programmes, menus, wine cards, etc., etc., of which many are pictured in Léon Maillard's "Les Menus et Programmes illustrés" and

E. Maindron's "Les Programmes illustrés." Numerous interesting pieces there are, graceful conceits by Moreau *le jeune* and his contemporaries, original conceptions by Bracquemond and other modern Frenchmen, elaborate productions such as Klinger's card of invitation to an art dealer's exhibit.

Many prints are illustrative in character,—portraits, views, historical scenes—as was set forth in the preceding chapter.

The direct application of the various processes of engraving to book-illustration proper has been indicated throughout the present volume. Particularly in the case of wood-engraving, that democratic art, the history of which, from the earliest block-book to the latest products of the American school, is practically a record of book-illustration in its most important aspect before the advent of the photomechanical processes. The influence of the latter was decided almost from the beginning, and has increased. Not only have they cheapened production and therefore extended it, but they have facilitated the activity of the illustrator. As an editorial in the Evening Post of New York pointed out not long ago, before the days of the camera the wood block called for some definiteness of statement on the part of the artist. Now he can work in any style, and slur details, for the new processes will reproduce the "half realized daub" as well as the careful drawing.1

American book and magazine illustration holds high rank, the highest, it is claimed. But there may be found individual cases of special prominence whose expression is not exactly appropriate. A clever or

¹This referred to the half-tone. Line process has played its part in the production of finely decorated books.

dashing or elegant drawing is not per se a good illutration. Nor is the swagger element always a sign of strength, or slighting of details necessarily a proof that the artist has summarily recorded an impression or has had any to record.

Illustration, to be adequate, must either elucidate the text or adorn it. The former implies insight and sympathy on the part of the artist; the latter, a feeling for decorative effect and harmony. A harmony that may comprise all the parts of the book ("end papers" and all), the "ideal" book of William Morris, who held that the outside of a book is determined by its contents. The establishment of this intimate connection between text, illustration and ornamentation is striven for by certain modern German artists whose aim is the "uniform impression" of the book. One may even find a Joseph Sattler designing not only illustrations and ornaments for a book, but the type as well. Illustration, as we ordinarily see it, is not intimately connected with the printed page and does not form book ornamentation conjointly with the text. It usually consists of pictures separate from the letter-press, deals with more or less realistic situations, and demands of the artist primarily an intelligent understanding of the text and the ability to state pictorially the psychical and physical relations between the different characters to be represented. This presupposes a sympathetic understanding of the mind in its various manifestations, a sympathy that responds readily to the varying notes struck by different aspects of humanity. This ability is possessed by Howard Pyle, W. T. Smedley, A. I. Keller and other Americans. The application of sound principles in book illustration may be traced in more detailed records of the art such as Pennell's "Pen Drawing and Pen Draughtsmen," Grautoff's "Entwicklung der modernen Buchkunst in Deutschland," Gleeson White's volume on the English illustrators of the sixties, and the well known books by Walter Crane and A. W. Pollard.

Questions of fitness, of psychological analysis, of conscientious study of each special case, enter into an adequate illustration together with good drawing and composition.

Thought is necessary as well as manual dexterity. The intelligence must join with the hands to produce work that shall be of lasting worth. And this requisite is inclusive enough to determine judgment in the consideration of any work of art.

A WORD IN CLOSING

I have tried in this book to accentuate liberality. Have your specialty, retain your most enthusiastic admiration for the form of art that pleases you best. But keep an unbiased eye and mind also for what is not so close to your heart. Be critical, but be liberal also. He who thinks and knows can much better afford to look indulgently at work that has faults—because he also sees what is good in it—than he who admires ignorantly.



INDEX

The aim has been to make this Index useful, and not to encumber it with a mass of irrelevant entries. Names of painters, for example, have not been indexed whenever they happened to be mentioned, but only when they directly helped to illustrate the subject-matter of this book.

A la poupée. See Poupée. Achenbach, Andreas and Oswald, 222. Acid. See Biting. Ackermann (publisher), 136, 141. Ad vivum, 278. Adam, Victor, 212. Adams, J. A., 181. Advertisements, 309. See Per-Aërial perspective. spective. Agoty, Gautier d'. See Gautier. Aikman, W. M., 189. Aldegrever, Heinrich, 67, 296. Algraphie, 209, 230. Alix, P. M., 138, 286. Alken, Henry, 136. Alma-Tadema, L., 235. Altdorfer, Albrecht, 67. Altered plates, 270, 286-287. Aluminium plates in lithography, 209, 230. Aman-Jean, E., 227. American Institute of Graphic Arts, 245. American Water Color Society, Amman, Jost, 69, 169, 247, 306. Amsterdam Cabinet, Master of the, 65. Anderson, Alexander, 186. Andreini, Andrea, 174. Androuet du Cerceau, Jacques, 77. Animals. For artists particularly identified with animal

subjects, see Barye, Berghem, Bonheur, Brascassat, Delacroix, Dujardin, Muy-Annis, W. T., 115. Annuals, Literary, 87, 121, 123. Anthony, A. V. S., 186. Appian, Adolphe, 34, 213. Appleton, Thomas G., 124. Aquafortis, 278. Aquatint, 114, 130-144 (Chapter V), 148, 250, 266; in combination with etching, 17, 18, 21, 35, 46, 47, 48, 49, 142, 143, 144; — with stipple, 140, 148, 158, 160; — with mezzotint, 141; used in photogravure, 243. Arcis, d'. See Darcis. Ardail (printer), 271. "Ars moriendi," 166. Artist's proof. See Proofs. Aubry-Lecomte, 210-211. Augrand, P., 159. Autotype, 147. Aveline, Pierre, 80. Avignon, F. d'. See D'Avignon. Bacher, Otto H., 41, 43. Baertsoen, Albert, 47. Baillie, William, 28. Baldini, Baccio, 73. Balestieri, 47. Bank-note engraving, 58, 90.

Barbari, Jacopo de', 74. Baren, 199.
Bargue, Charles, 215.
Barney, W. W., 120.
Bartolozzi, F., 147, 149, 152-154, 160, 161, 260, 262, 306. Barye, A. L., 212, 224. Basan, P. F., 277. Bath, Etching. See Biting. Baude, Charles, 190. Baudoux, Robert de, 279. Bauer, M., 47, 232. Baugniet, 220. Bause, J. F., 85. Baxter, George, 247, 248. Beckett, Isaac, 98. Bega, C., 30. Beham, B. and H. S., 55, 67, 68, 279, 280. Bejot, 48. Bella, Stefano della, 31. Bellangé, Hippolyte, 215. Bellay, Ch., 90. Belliard, Zéphyrin, 220. Bennett, W. J., 137. Berghem, Claes (Nicolas), 29. Bernström, Victor, 189. Berri, Marie Caroline, Duchesse de, 209. Bervic, J. G., 282. Besnard, A., 227. Bewick, Thomas, 177-178, 179, 180-181, 267, 306. Bible illustrations, 162, 167, 169, 173, 181, 182, 183, 186, 202, 296. Biblia pauperum, 162. Biese, Karl, 193, 231. Bird, Charles, 126. Biting, Acid, in etching and aquatint, 12, 13, 14, 19, 30, 114, 131, 132; --- stipple, Biting, Foul, 17, 130. Blake, William, 250-251, 260. Blanchard, A., 90. Block-books, 162, 165, 247. Block-printing in schools, 165. Blooteling, Abraham, 73, 97, 98. Bluck, J., 137. Blum, Robert F., 44.

Bodmer, Karl, 213. Boilly, L. L., 217. Boissieu, J. J., 17, 31. Bol, Ferdinand, 27. Boldrini, Niccolo, 173. Bolswert, Schelte a, 72. Bone, M., 42. Bonheur, Rosa, 212. Bonington, R. P., 225. Bonnet, L. M., 159, 250. Book illustration. See Illustration. Book-plates, 56, 300, 303-307. Botticelli, 73-74, 173. Boucher-Desnoyers, A., 90. Boutet de Monvel. See Monvel. Bouvenne, A., 306. Bouvier, 221. Boxwood in wood engraving, Boydell, J., 84, 141, 277, 280. Bracquemond, Félix, 33, 36, 47, 142, 227, 240, 268, 302, 306, 310. Brangwyn, Frank, 42. Branston, Robert, 181. Brascassat, J. R., 212.
Bretherton, James, 286.
Brion, E., 80.
Brown, J. Lewis, 228.
Brown, M. E. D., 235. Browne, Tom, 308. Brunet-Debaines, A., 34, 141, 142, 295. Brunswick black. See Stopping-out varnish. Bry, T. de, 296. Büchel, Ed, 90. Buhot, Félix, 12, 18, 34-35, 142, 270, 274. Burgkmair, Hans, 168, 169, 174, 282. Burin. See Graver. Burnisher and burnishing, 14, 55, 95, 149, 269, 270. Burr in dry-point, 19, 94, 266. Burt, Charles, 90, 91.

Cadart (publisher), 32. Caduceus, Master of the. See Barbari.

Calamatta, Luigi, 90. Calame, A., 226. Callot, Jacques, 30-31, 296. Camaïeu. See Chiaroscuro. Cameron, D. Y., 42, 272, 306. Campagnola, Domenico, 74. Campagnola, Giulio, 74. Canaletto, 31. Canceled plates, 281-282. Card designing, 309. Cardon, A., 158. Caricature, La, 213 Caricature, 297; in mezzotint, 113; in lithography, 213, 217-219, 229; in wood engraying, 184. Carpi, Ugoda, 174. Carracci, Agostino, 70, 76. Cars, Laurent, 80. Cassatt, Mary, 35, 48, 49, 143, 194, 236, 281. Castiglione, G. B., 27, 31. Caylus, Comte de, 80, 148. Chabanian, 47. Chahine, Édgar, 47. Chalk manner. See Crayon manner. Chambers, Jay, 306. Changed plates. See Altered plates. Chap-books, 163. Chaplin, Charles, 221. Chapman, 157, 251. Chapman, J. G., 181. Chardin, J. B. S., 80. Charivari, 213. Charlet, N. T., 214, 215, 216-217, 295. Chartran, T., 228. Chauvel, Théophile, 36, 221, 297. Chavannes. See Puvis Chavannes. Chéret, Jules, 226, 227, 307-308. Chevallier, G. S. See Gavarni. "Chiaroscuro" Method, 140, 147, 173-174, 175, 248. Chifffart, N. F., 34. Children's books, 246. Chodowiecki, Daniel, 31, 270, 284, 306.

Choffard, P. P., 81. Christopher, St.: wood-cut of 1423, 165. Chromo - Lithography. See Color printing: Lithographs. Chromo-xylography, 195. See Color printing: Wood engravings. Chromos, 3. Clark, John, 136. Classification of prints, 292-293. Claude Lorraine. See Gelée. Cleaning prints, 290. Clennell, Lucas, 181. Cliché. See Electrotype. Clint, G., 115. Closson, W. B., 189. Clouston, R. S., 124, 125. Cochin, C. N. (the younger), 81. Cockson, Thomas, 82. Cole, J. Foxcroft, 236. Cole, Timothy, 189. Colin, Paul, 193. Collas ruling machine, 240. Collecting, 256-263 (Chapter XI), 300-301. Collectors' marks, 258, 284. Collotype, 146, 243. Colman, Samuel, 43. Colonna's "Hypnerotomachia Poliphilii," 172, 176. Color photography, 244, 245. Color printing, 246-255 (Chapter X), 274; etchings, 47-50, 246, 254; line engravings, 246; mezzotints, 126, 246, 249, 251, 253, 280; aquatints, 137-140, 143, 144, 246; stipple, 148, 158-160, 246, 250, 251, 252; wood engravings, 173, 174, 189, 192, 193, 202, 246, 247, 248. (See also Japanese prints); lithographs, 226, 227, 228, 230 - 232, 246, 253; photomechanical processes, 244-246, 251. Color prints, Forged, 284. Coloring by hand, 246, 252;

aquatints, 134, 135, 136, 140, 141; stipple, 158, 159; wood engravings, 166, 176, 247; lithographs, 230; William Blake's prints, 251. Comte process, 240. Cook, H. R., 157. Cooke, George, 90. Cooper, T. S., 226. Copies, 28, 285-286. See also Forgeries. Coqueret, P. C., 138. Corbutt. See Purcell, Rich-Corot, J. B. Camille, 32. Cottet, 48. Counter-proofs. See Proofs. Cousin, Jean, 176. Cousins, Samuel, 96, 100, 121. Cradle. See Rocker. Cranach, Lucas, 168, 174. Crane, Walter, 306. Crayon or chalk manner, 146, 147, 148, 250. Crome, John, 21. Cross-hatching in line engraving, 65, 73, 76, 82, 91, 97; -- in wood engraving, 166, 167, 168, 170, 171, 177 - 179, 181, 182, 183, 184; ---- in lithography, 214, 220. Cruikshank, George, 43, 136, 297.

Dagnan-Bouveret, P. A. J., 228.
Dake, Carel L., 47.
Dalziel Brothers, 183.
Dance of Death. See Death.
Daniell, T., 137.
Daniell, William, 135, 137.
Darcis, Louis, 159.
Darley, F. O. C., 91, 208.
Daubigny, C. F., 32.
Daumier, Honoré, 191, 217-218, 297.
Davies, A. B., 144, 237.
D'Avignon, F., 235.
Davis, J. P., 189.
Dawe, H., 115.
Dayes (publisher), 134.

Dean, John, 103, 107. Death, Dance of, 169-171, 176. Debucourt, P. L., 138-139, 148, 254, 260. Decamps, A. G., 213-214, 217. Del., 278. Delacroix, Eugène, 142, 211-Delaram, Francis, 82. Delâtre, A., 21, 271. Delâtre, E., 47. Delattre, I. M., 153, 154. Delaune, Etienne, 77. Delineavit, 278. Delpech (printer), 278. Delpy, 47. Demarteau, Gilles, 148. Demonchy, Fme, 159. Desboutin, Marcelin, 34, 227, 295, 302. Descourtis, C. M., 138. Desnoyers, A. Boucher-. Boucher-Desnoyers. Detaille, E., 228, 296. Déveria, Achille, 219, 302. Diaz de la Peña, Narciso V., Dickinson, William, 102, 109. Didier, A., 90. Die. Master with the. Master, etc. Dietrich, C. W. E., 31. Dillon, H. P., 227. Direxit, 277, 278. Dixon, John, 101-102, 109, 111. Doepler, Emil d. J., 306. Doo, G. T., 90. Doolittle, Amos, 92, 298. Doré, Gustave, 182, 202, 217. Dotted prints, 145. Doughty, William, 103, 106. Dow, Arthur W., 194, 201, 309. Drawings reproduced, 146, 147, 250; by aquatint, 134, 140, 141, 147; by the crayon manner, stipple and mezzotint, 147, 148, 250; by wood engraving, 173, 174, 202; by lithography, 215; by photomechanical processes, 146, 243.

Drevet. Pierre and Pierre Imbert, 78, 79, 297. Dry-point, 15, 17, 19-20, 266; used with line engraving, 55. Ducerceau. See Androuet. Duchatel (printer), 271. Dürer, Albrecht, 55, 60, 61, 70, 91, 166, 275, 306; line engravings, 65-67, 68, 69, 74, 268, 269, 274; wood engravings, 167-168, 169; portraits, 92, 302; his signature, 279; Bible scenes, 296; fac-similes and copies, 285-286. Du Jardin, Karel, 29. Dunkarton, Robert, 102, 110, 115, 126. Dupré, Jules, 213. Durand, A. B., 90. Dusart, Cornelius, 97, 296.

Duveneck, Frank, 43.

Duvet, Jean, 77.

Dyck, A. van, 29, 30, 260, 284. E. S. See Master E. S. Earlom, Richard, 105, 111, 112, 114, 155, 280. Easling, J. C., 115. Echoppe, 147. Eckmann, Otto, 193. Edelinck, Gérard, 78, 79, 296. Edwards, Geo. Wharton, 306. Edwards, S. Arlent, 126. Edwin, David, 160. Egusquiza, R. de, 297, 302. Eilers, G., 90. Einschlag, E., 143. Eisen, Charles, 81, 306. Electrotypes, 180, 240. See Elten, Kruseman van. Kruseman van Elten. Embossed effect in Japanese prints, 198; in lithographs, 225, 228. "English manner," 122. Mezzotint. Engraving. See Line engraving and Wood engraving. Estampe (L') moderne, 253. Estampe (L') originale, 143, 227, 253.

Etching 11-52 (Chapter II). 199, 266; used in line engraving, 31, 55, 56, 68, 81, 83; - with mezzotint, 96, 114, 119; -- in aquatint, 132, 137, 140, 144; — in crayon manner, 147; — in stipple 151, 155; — for half-tone plates, 242; — for photograyure, 243; reproductive etching, 32, 36-37, 258. Etching, Soft-ground. Soft-ground etching. Etching on stone, 208. Etching-ground, 12, 14, 15, 19, 133, 147, 148, 149, 270. Etching-needle 12, 18. also Echoppe. Everdingen, A. van, 29. Every, George, 124. Ex-libris. See Book-plates. Excudit, 277, 278. Extra-illustrating, 300.

Faber, John, senior and junior, Faithorne, William, 82, 279, 306; the younger, 98. Falk, Jeremias, 84. Fantin-Latour, H., 228-229, 253, 297, 303. Farrar, Henry, 21. Fecit, 278. Feckert, G., 222, 297. Fevret de St. Memin. See St. Memin. Ficquet, Etienne, 81. Fikentscher, Jenny, 231. Finden, E., 86, 277. Finiguerra, Maso da, 62. Fischer, Otto, 143, 231. Fisher, Edward, 101, 102, 106, 108, 109. Flameng, Léopold, 36, 285, 297. Flipart, J. J., 8o. Forgeries, 283-286. Formis, 278. Fortuny, M., 142. Foster, Birket, 183. Foul biting, 17, 130.

Fragonard, J. H., 80.
"Framing prints," 87, 91, 123.
Francia, Jacopo, 75.
François, J. C., 148.
French, E. D., 56, 306, 307.
French, Frank, 189.
Frère, Ed., 213.
Frye, Thomas, 126.

Gaillard, F., 55, 90, 92. Gaillard, Robert, 80. Gandolfi, Mauro, 77. Gardens of Love, Master of the, 63. Garrett, E. H., 306. Gaucher, C. E., 81. Gauermann, Friedrich, 45. Gautier d'Agoty, J. F., 249. Gavarni (G. S. Chevallier), 206, 217, 218-219, 297. Geddes, Andrew, 28. Gelatine in photomechanical processes, 241-242. Gelée, Claude (Claude Lorraine), 29, 118, 280. Genre art, 2, 72, 87-88, 91, 105, 107, 111-112, 185, 296. Gérard, H., 159. Gérard, I. A. See Grandville, J. J. Géricault, Théodore, 211. Geyger, E. M., 46, 230. Gheyn, Jacob, 72. Ghisi, Georgio, 76. Gifford, R. Swain, 44. Gihaut Brothers, 213. Gilbert, Achille, 221. Gillot process, 240. Gillray, James, 297. Girodet-Trioson, 210. Glackens (W. J.), 237. Glockenton, Albert, 64 Goff, Col. R., 42. Gold printing, 140, 174. Goltzius, Hendrik, 70-72, 171, 174, 279, 296. Goldsmith's work, Early Italian, 62, 73. Gosselin, E., 286. Goulding, F. (printer), 271. Goya, F., 32, 142, 226, 282.

143. Graf, Urs, 168, 179. Grandville, J. J. (I. A. Gérard), 217. Grangerizing, 300. Grasset, E., 226, 308. Grateloup, J. B. de, 81. Gravelot, H. F., 31, 81. Graver, 12, 17, 54, 56, 57, 145, 164, 179. Gravesande, Storm van 's. See Storm van 's Gravesande. Gravure au lavis, 130, 139. Green, C., 183. Green, Valentine, 101, 103, 105, 110, 113. Greiner, Otto, 206, 229 - 230, 306. Grenier, François, 210. Greuze, J. B., 80, 138. Grévedon, Henri, 220, 222. Grien, Hans Baldung, 169, 174. Grimelund, J., 47. Gros, Baron, 210. Ground. See Etching-ground. Grozer, Joseph, 104, 112. Guérard, Henri, 18, 34, 47, 49. Guérin, Pierre N., 210. Guyot, Laurent, 138. Haden, Sir Seymour, 13, 14, 18-19, 22, 28, 41, 127, 272, 283. Haid, J. E., 97-98. Haig, A. H., 47. Half-tone process, 242,

Graf, Oskar, 46, 48, 49, 142-

Haden, Sir Seymour, 13, 14, 18-19, 22, 28, 41, 127, 272, 283.

Haid, J. E., 97-98.

Haig, A. H., 47.

Half-tone process, 242, 243, 244, 245.

Hamerton, P. G., 16.

Hamilton, J. McLure, 235.

Harding, J. D., 225-226.

Hardy, Dudley, 308.

Harunobu, Suzuki, 196, 200.

Harvey, William, 181.

Haskell, Ernest, 237, 309.

Hatching. See Cross-hatching.

Havell, D., 137.

Heath, Charles, 86, 277.

Hecht, Wilhelm, 185.

Hegenbart, Fritz, 142. Heinemann, Ernst, 189. Helleu, Paul, 35. Henriquel-Dupont, L. P., 90. Herkomer, Hubert von, 16, 42, 56, 127, 234. Herrick, H. W., 186. Hervier, A., 215. Hill, John, 137. Hill, John Henry, 43, 144. Hinshelwood, R., 90, 276, 277. Hiroshige, 197. Hoch, Franz, 230. Hodgetts, T., 115. Höfel, Blasius, 181-182. Holel, Blastus, 181-182. Hogarth, William, 84, 92. Hokusai, 195, 196. Holbein, Hans, 169-171. Hole, William, 82. Holl, William, 151. Hollar, Wenzel, 30, 85. Holroyd, Sir Charles, 42. Homer, Winslow, 236. Hopson, W. F., 306. Hornby, L. G., 44. Horsburgh, 90. Horsburgh, 90. Houbraken, Jacob, 73. Houdard, Charles, 47, 49, 143. Houghton, Boyd, 183. Houston, Richard, 96, 101, 111. Huber, Konrad, 208. Huet, Paul, 32, 215. Hullmandel, C., 225, 271. Hunt, Wm. Morris, 236. Hyde, Helen, 144, 194.

I. A. of Zwolle, 64.
I. B. See Master I. B. with the Bird.
Ibels, H. G., 238, 253.
Illustration, 310-312; by etching, 31, 33, 42; — line engraving, 68, 81, 86, 87, 177; — mezzotint, 122; — aquatint, 133-137, 141; — wood engraving, 163-173, 175-177, 181-184, 186, 188, 240, 269, 310; — lithography, 208, 209; — photomechanical processes, 240, 242, 245, 251; illustrations

from non-authentic sources. Imp., 278. Impression (the individual print), 264; importance of good impressions, 8, 118, 260, 279, 280, 283. Incidit, 278. Incunabula, 167, 247. Ink and inking, 56. Importance of, 273; in etching, 13, 15, 16, 199, 273; in mezzotint, 95, 119, 120, 273; in aquatint, 143; in stipple, 157; in woodengraving, 199; in lithography, 230; inking à la poupée, 49, 143. See also Color printing. Inscription ("Letters"), 267, 268, 271. Intaglio processes, 56, 163, 164, 243, 265. See Chapters II-VI, and IX. Inv., Invenit, 278. Isabey, Eugène, 214-215, 238. Isabey, J. B., 210. Isochromatic plates, 244. Ivanowski, S. de, 300.

Jackson, John Baptist, 177, 248.
Jacob, N. H., 222.
Jacque, Charles, 17, 18, 21, 32, 142, 217, 270, 271, 281, 288.
Jacquemart, Jules, 18, 33-34, 104, 273, 295.
Jacques, Jules, 90.
Janinet, François, 138.
Japanese prints, 5, 174, 192, 194-201, 232, 247, 248, 274, 295-296.
Jardin, Karel du. See Du Jardin.
Jazet, J. P. M., 140.
Jeanniot, 49.
Jeghers, Cristoph, 171, 174.
Jettmar, R., 46, 230.
Jode, Pieter de, 72.
Johnson, Thomas, 189.
Jones, Alfred, 90, 91, 277.
Jones, John, 102, 104, 106, 109, 114, 155-156.

Label designing, 309.

Jongkind, J. B., 34.
Josey, Richard, 124, 125-126.
Jourdain, H., 47, 143.
Judkins, Elizabeth, 108, 110.
Juengling, Frederick, 186, 187, 268.
Juengling, J. F., 187.
Julien, 214.
Junior Etching Club (London), 38.

Kallmorgen, Friedrich, 231. Kaltnadel. See Dry-point. Karlsruhe Künstlerbund, 46, 220, 231, 300.
Keating, George, 112.
Keene, Charles, 42, 183, 184.
Keller, Arthur I., 311.
Kelly, J. E., 186.
Keppler, Joseph, 219.
Kerver (publisher), 176. Key-block in color prints, 198. Key-plate in color prints, 248. Kilian, Lucas, Philip and Wolfgang, 84. King, F. S., 189. King, J. S., 126. Kingsley, Elbridge, 189. Kirkall, Edward, 177. Kiyomasu, Torii, 196. Kiyonaga, 197, 200. Kiyonobu, Torii, 196, 200. Klinger, Max, 46, 48, 143, 230, Knight, Joseph, 126, 127. Kobell, Ferdinand, 31. Koepping, Karl, 36. Kolb, Alois, 142. Kollwitz, Käthe, 46, 230. Koriusai, 196. Kriehuber, Josef, 223. Krüger, Franz, 223. Kruell, Gustav, 189. Kruseman van Elten, H. D., 21, Küsel, Matthäus and Melchior, Kurzweil, 193.

Laage, Wilhelm, 193. Laboureur, J. E., 56.

Laffitte, Alphonse, 48. Lalanne, Maxime, 16, 34. Lalauze, Ad., 273. Lami, Eugène, 220. Landscape in etching, See Chapter II; in line engraving, 67, 80, 83-86, 90; in mezzotint, 113, 114-119, 126, 127, 128; in stipple, 158; in aquatint, 133-135, 137, 140, 141, 142, 143; in wood engraving, 172, 180, 189; in Japanese prints, 200. Lane, R. J., 226. Larmessin, Nicolas de, 80. Latenay, G. de, 47, 143. Lathrop, W. L., 43. Laukota, Hermine, 143. Launay, Nicolas de, 80. Laurens, Jules, 221.
Lautensack, H. S., 68.
Lautrec. See Toulouse-Lautrec. Lavis, 130, 139. Lavreince, Nicolas, 81. Léandre, C., 253. Le Bas, J. P., 80, 277. Le Blon, J. C., 249. Lecomte, Marie, 27. Leech, John, 43, 183, 219, 279. Lefort, Henri, 229. Legrand, Augustin, 159. Legros, Alphonse, 41-42, 128, 234, 302. Leistikow, Walter, 46. Lemercier (printer), 271. Lemud, Aimé de, 214. Le Noir, Rose, 151. Lepère, A., 47, 175, 192-193, 253. Lepic, Le Comte, 16. Lepicié, Bernard, 80. Le Prince, J. B., 133, 134. Le Rat, Paul, 36. Leroux, Eugène, 221. Lettering on copper plates, "Letters." See Inscription. Levachez, 138. Lewis, A. A., 175. Lewis, F. C., 114, 140, 141, 142.

Leyden, Lucas van, 60, 65, 69, 70, 171, 280, 296. Lichtdruck, 146, 243. Liebermann, Max, 21. Lievens, Jan, 25, 27, 174. Line engraving, 53-93 (Chapter III), 94, 145, 162, 266; used with mezzotint, 122; with stipple, 151, 158, 160. See also Graver. Linoleum prints, 203. Linton, W. J., 183, 186, 187, 188, 269. Lith. de, 278. Lithography, 204-239 (Chapter VIII); for posters, 307. Lithotint, 225, 233. Little Masters, 67, 68, 91, 169. Llanta, J. F. G., 220. Lombart, Pierre, 287. Longacre, J. B., 160. Longhi, Giuseppe, 77. Longueil, Joseph de, 81. "Lozenges" in line engraving, 146. Lucas, David, 119. Lucas van Leyden. See Leyden. Lützelburger, Hans, 169. Luigini, F. T., 143. Lumière color photography, 244. Lunois, A., 227-8, 231, 238, 253. Lupton, Thomas, 115, 118, 119, 120, 121.

McArdell, James, 100, 101, 111, McBey, J., 42. McCormick, H., 194. MacLaughlan, D. S., 35. Make-ready, 180. Malton, J., 137. Mandel, Ed., 90. Manet, E., 35, 142. Manière anglaise (stipple), 152. See Stipple. See also Mezzotint. Manière criblée, 145. Manière noire (mezzotint), 95. See Mezzotint. Mantegna, Andrea, 55, 58, 74, 91, 268.

Manuel, Nicolas, 168. Marc Antonio. See Rai mondi. Marchi, J. P. L., 106. Margins, 271; false, 284. Mariette, P. J., 277. Marillier, P. C., 81. Marsh, Henry, 186.
Marshall, William, 82.
Martial, A. P. (A. M. Potémont), 16.
Martin, John, 119.
Marvy, Louis, 21.
Massard, Lee, 22. Massard, Jean, 80. Masson, Antoine, 78, 79, 296. Master of the Amsterdam Cabinet, 65. Master of the Caduceus. See Barbari. Master with the Die, 75, 279. Master E. S. of 1466, 63, 64, 68, 279, 287. Master of 1464, 63. Master of the Gardens of Love, 63. Master I. B. with the Bird. Master of the Playing Cards, Master of the Weaver's Shuttle. See I. A. of Zwolle. Mats, 291. Mattoir, 147. Maurin, Charles, 48. Maurou, Paul, 228. Maverick, P. and P. R., 92. May, Phil, 306. Meckenen, Israel van, 64, 280, Meissonier, J. L. E., 32. Mellan, Claude, 77-78, 91. Melton (publisher), 134. Menpes, Mortimer, 41, 42, 271, 303. Menus, 309. Menzel, Adolph von, 45, 182-183, 206, 223-224, 271, 295. Merian, Matthäus, 85. Merians, The, 84. Meryon, C., 17, 22, 36, 37-38, 260, 267-268, 273, 274,

copied by Gosselin, 295; 286. Meyer, Henry, 108, 154. Mezzotint, 20, 82, 94-129 (Chapter IV), 133, 147, 163, 251, 266, 280. "Mezzotint method" in lithography. See Scraper in lithography. Michalik, L., 48, 49. Mielatz, C. F. W., 16, 17, 21, 44, 143, 237, 272. 44, 143, 257, 272.

Millais, J. E., 183, 256.

Millar, A. T., 21, 44, 144.

Millar, Fred, 126.

Miller, Charles H., 43.

Miller, John D., 124.

Miller, W., 86, 90.

Millet, J. F., 33, 213, 269.

"Mixed" methods, 148, 149; in mezzotint, 96-97, 121-122; in stipple, 149, 151, 152, 157, 160. See also references under Aquatint, Etching, Line engraving, Mezzotint and Stipple, to use of the medium in combination with others. Mocetto, Girolamo, 74. Modena, Nicoletto da, 74. Moll, Karl, 193. Monks, J. A. S., 43. Monnier, Henri, 217. Monograms, 279. Monotype, 130. Montagna, Benedetto, 74. Montpensier, Antoine Philippe d'Orléans, Duc de, 209. Monvel, Bernard Boutet de, Moran, Mrs. Mary Nimmo, 43, 130. Moran, Peter, 43 Moran, Thomas, 43, 236. Moreau, J. M., le jeune, 31, 81, 92, 295, 310. Morgenstern, Johann Friedrich, 45. Morghen, Raphael, 61, 76-77, Morin, Jean, 78.

Morland, George, 105, 111,112.
Morret, J. B., 139.
Morris, William, on book decoration, 311.
Motte, C. (printer), 271, 278.
Mouilleron, Adolphe, 220.
Mounting prints, 291.
Mucha, Alphonse, 253, 308.
Müller, F. W., 85.
Müller, J. G., 85-86.
Munch, Edvard, 47.
Musi, Agostino de', 75.
Muyden, Evert van, 47.

Nanteuil, Célestin, 220.
Nanteuil, Robert, 55, 71, 78, 79, 296.
Nast, Thomas, 297.
Nesbit, Charlton, 181.
Neumont, Maurice, 229.
Neureuther, E., 45.
New York Etching Club, 43-44.
Newsam, Albert, 235.
Nicholson, William, 194, 303, 306.
Nicoll, J. C., 43.
Nielli, 62.
Noël, Léon, 220.
Nolde, Emil, 45.
Norblin, J. P., 27, 285.
Nordfeldt, B. J. O., 194.
Nuremburg Chronicle, 166, 299.
Nutter, William, 154.

Odieuvre, 277.
Open letter inscription, 271.
Opus mallei, 145.
Orlik, Emil, 45, 193, 231, 306.
Orthochromatic plates, 244.
Osgood, H. H., 45.
Ostade, A. van, 29, 30.
Osterlind, Allan, 47.
Overbeck, F., 46.
Overlaying, 180.

Paczka, Cornelia, 46, 209, 230. Paintings, Reproductions of. All of the arts dealt with in this book have served more or less to reproduce paintings, as noted on pp. 296-

207. Reproductive etching, 32, 36-37, 258; line engraving, Chapter III; mezzotint, Chapter IV; aquatint, 138-140; stipple, Chapter VI; wood engraving, 185, 187-190; lithography, 211, 220-222; photography, 244; photomechanical processes, 244 tomechanical processes, 245. Palmer, Samuel, 42. Pannemaker, A. F., 179, 182. Paper, Important part played by, in etchings and other prints, 16, 17, 273-275; tinted, in etchings, 48, 231; treated, in forgeries, 283. See also Water-marks. Park, Thomas, 107. Parrish, Stephen, 43. Parsons, Alfred, 235. Payen, J. A., 159. Peale, Charles Willson, 122. Peale, Rembrandt, 235. Pelham, Peter, 122. Pencz, Georg, 67. Pennell, Joseph, 5, 14, 42, 43, 131, 144, 233, 234, 237, 272, 295. Perspective, Aërial, 66, 67, 69. Pether, William, 105. Pettenkofen, August, 223. Philips, G. H., 121. Photographs, Use of, 244. Photography in color, Photogravure, 123, 124, 240, 242-243. Photomechanical processes, 162, 240-245 (Chap. IX), 251. Phototype. See Collotype. Pichler, J., 98. Pichon, 47. Pietschmann, Max, 128. Pigouchet, 176. Pinwell, G. J., 256. Pinx., 278. Piranesi, G. B., 32, 283. Pirodon, E. L., 221. Pisan, H., 182. Pissarro, Lucien, 193.

Planographic processes,

265,

266. See Collotype and Lithography. Plank, G. W. Plate-mark, 265-266; false, 284. Platt, C. A., 5, 28, 43. Playing Cards, Master of the, 63. Pleydenwurff, 166. Ploos van Amstel, Cornelis, 148, 250. Point, Armand, 20.
Pointe sèche. See Dry-point. Pollard, James, 136. Ponce, Nicolas, 81. Pontius, Paul, 72. Porporati, C. A., 77. Portfolios, 292. Portman, L., 252. Portraits. Art of portraiture, 302-303. Numerous ences to portraits will be found in the chapters on etching, line engraving, mezzotint, stipple and lithography. Posters, 175, 194, 208, 226, 303, 307-309. Potémont, A. M. See Martial. Potter, Paul, 29. Poupee, Inking à la, 49, 143, Prang, Louis, 226. Prestel, J. T. and Marie Catherine, 140. Prices of prints, 38, 81, 153, 258-262. Printing, 271-272; --- etchings, 15-17; ---- lithographs, 266. See also Ink and Register. Prints, Care of, 289-293 (Chapter XIII). Printsellers. See Publishers. Private plates, 277. Programmes, 309. Proofs, 267-268, 271; trial proofs (working proofs), 267, 268, 271; counter proofs, 268; false proofs, 284; masked proofs, 284; remarque proofs, 271; ar-

tist's proofs, 271; corrected by painter of the picture reproduced, 100, 269. Protzen, Otto, 128. Prout, Samuel, 21. Prouvé, V., 143. Prud'hon, Pierre, 211. Prunaire, Alfred, 191. Pry, Paul, 279. Publishers of prints, 30, 32, 76, 84, 102, 113, 134, 136, 141, 227, 271, 277, 280. Pugin, A. C., 133. Punching, 145. Purcell, Richard, 102, 279. Puvis de Chavannes, P., 227. Pyle, Howard, 311.

Raffaëlli, J. J., 47, 49, 254. Raffet, A., 215-216, 295. Raimondi, Marc Antonio, 55, 68, 69, 75, 286. Rain-water as a mordant, 130. Rajon, Paul, 8, 37, 297, 302. Ranft, 48, 49. Ranger, H. W., 236. Raphael, 75. Rasch, O., 230. Rassenfosse, 306. Ravenna, Marco de, 75. Redon, Odilon, 229. Register, 174, 199, 249. Regnault, N. F., 160. Relief processes, 56, 163, 164, 241, 242, 265, 266; dotted prints, 145; W. Blake's process, 250. See also Wood engraving and Photomechanical processes. Remarque proofs. See Proofs. Remarques, 271; false, 284. Rembrandt, 19, 20, 21, 22, 23-29, 30, 35, 261, 270, 293, 302; followers, influence, 86; prices, 262; late impressions, 283; forgeries, 284; copies, 285-286. Repairing prints, 290. Reproductive art. See Paint-

Restrikes, 253, 283.

Rethel, Alfred, 170, 183. Retouching worn plates, 103, 122, 280-281. Retroussage, 16. Reuwich, Erhard, 166. Revere, Paul, 92, 299, 306. Reynolds, Sir Joshua. Repeated mention of his paintings will be found in Chapter IV. His interest in the reproduction of his work is indicated on pp. 100 and 269. Reynolds, S. W., 106, 112, 115, 120. Rhead, Louis, 308. Ribera, Joseph, 31. Ribot, Théodule, 228. Richter, Ludwig, 183. Ricketts, C., 194. Ridley, 157. Rippl-Rónai, 47. Ritchie, A. H., 91, 123, 287. Rivière, Henri, 193, 253. Robbe, Manuel, 47, 143, 253. Robinson, Gerald, 124, 125. Rochebrune, Octave, Comte de. 34, 295. Rocker or rocking-tool, 94-98. Rodin, A., 253. Rogers, William, 59, 82. Rolph, J. A., 276. Rops, Félicien, 21, 227. Rosa, Salvator, 31. Rosenberg, C., 136. Roth, E. D., 45. Rossetti, D. G., 183. Rothenstein, Will, 234. Roulette, 96, 130, 250; in etching, 17, 21, 35, 46; in mezzotint, 96, 97, 119, 122; in aquatint, 137, 139, 143; in the crayon manner, 147; in stipple, 148-150, 160; machine rouletting, 149.
Rowlandson, Thomas, 133, 136.
Rubens, P. P., 72, 75, 171, 269.
Rugendas, Georg Philipp, 98.
Ruling machine, 18, 19, 240. See also Collas.

Rupert, Prince, 97, 98.

Ruysdael, J., 29.

Ruzicka. R, 175, 194. Ryland, W. W., 152.

Sadeler, Egidius, 66, 84. Sadeler, Ralph, 270. Saenredam, Jan, 72. St. Aubin, Aug. de, 31, 81. St. Memin, C. B. J. Fevret de, Salmon (printer), 271. Salt for producing an etched tint, 131. Sand grain, sandpaper method, sandpaper mezzotint, 130, 131. Sandya F., 183, 256. Sargent, J. S., 236. Sartain, John, 122, 123. Sartain, Samuel, 123. Sartain, William, 123. Satin, Prints on, 274. Sattler, Joseph, 306, 311. Savage, Edward, 122, 160. Savage, W., 248. Savart, Pierre, 81. Say, William, 115, 120. Sayer, R. (publisher), 102, 113. Schabkunst (mezzotint), 95. See Mezzotint. Schäuffelein, Hans, 168, 279. Schiavonetti, L., 154, 158. Schmidt, G. F., 27, 71, 85. Schmutzer, F., 46. Schneider, O. J., 45. Schnorr von Carolsfeld, Julius, Ritter, 183. Schongauer, Martin, 64, 296. School-book illustration, 163. Schrotblätter, 145. Schwind, Moritz, Ritter von, 183. Scraper and scraping, 54, 270; in line-engraving, 54, 55; —— mezzotint, 94, 95, 96, 97, 101, 102, 266; --- aquatint, 143; --- stipple, 149; --lithography, 204, 208, 211, 214, 215, 217, 218, 221, 223, 224, 225, 233, 234, 236; —— photomechanical processes, 243. Sculp., sculpsit, 229. Seghers, Hercules, 249.

Seidel, O., 90. Senefelder, Aloys, 206-207, 216. Senseney, George, 44, 48. Sergent, A. F., 138. Sezanne, Auguste, 143. Shannon, C. H., 233. Sharp, William, 82, 83. Sherborn, C. W., 56, 267, 306, 307. Sherwin, J. K., 154. Sherwin, William, 98. Shigemasa, Kitao, 196. Short, Frank, 16, 21, 127-128, 143, 234, 240. Shortshanks, 279. Sichem, Christoph van, 171. Siegen, Ludwig von, 97. Signac, 227. Signatures, 279. Simon, T. F., 49. Simon, John, 98. Simon, Peter, 155. Simonet, J. B., 80, 81. Sintzenich, Heinrich, 160. Sirouy, A., 212, 221. Skrimshire, A. J., 124. Sleigh, Bernard, 194. Slevogt, Max, 230. Sloan, John, 45. Slocombe, C. P. and F., 42. Smedley, W. T., 311. Smille, James, 90, 276. Smillie, Jas. D., 21, 44, 128, 144. Smith, J. A., 45. Smith, John, 98. Smith, John Raphael, 100, 101, 103-104, 107, 108, 112, 121, 124, 126, 156, 251, 252, 262. Smithwick, J. H., 186, 189. Société Française de Gravure, 90. Société de Peintres-Lithographes, 227. Society of American Wood Engravers, 188. Society of Mezzotint Engravers, 124. Soft-ground etching, 20, 21, 48, 148, 266. Soiron, F. D., 155. Solander cases, 292. Solis, Virgil, 69.

Somer, P. van, 98. Soulange-Teissier, 212. Soutman, Pieter, 72. Spatter work in lithography, 208, 227. Spenceley, J. W., 306. Spooner, C., 96. Sporting prints, 111, 112, 136. Stadler, J. C., 137. States, 267-268, 271, 272, 273. Stauffer, D. McN., 306. Stauffer-Bern, Karl, 56. Steel engraving, 53-54, 86, 119-120, 276, 281. Steel facing, 53, 86, 121, 281. Steinhausen, W., 230. Steinlen, Alexandre, 48. Stevenson, F. G., 126. Still life subjects were etched particularly by Jacquemart and Guérard. Stimmer, Tobias, 174. Stipple engraving, 145 - 161 (Chap. VI), 163, 273, 285; used with line-engraving, 86. Stone, Marcus, 235. Stone, W. M., 306. Stopping-out, 14, 131-135, 149. Stopping-out varnish, 14, 132, Storm van 's Gravesande, C., 28, 47, 232. Strang, W., 42, 131, 193. Strange, Sir Robert, 82, 83, 151, 306. Strixner, J. N., 222. Struck, Hermann, 46. Sulphur-tint, 130. Suppantschitsch, Max. 48, Surugue, Louis and Pierre Louis, 80. Sutherland, T., 137. Suyderhoef, Jan, 72. Swell-gelatine process, 242.

Tardieu, N. H. and P. A., 80. Tarot cards, 73. Taylor, Baron, 225.

Technique, 264. The importance of technique is more or less emphasized throughout the book. Tenniel, Sir John, 183, 184. Textures, Rendering of, in etching, 25; — line-engraving, 65, 70, 78, 82, 83, 85; ---- mezzotint, 102, 103; ---stipple, 153, 155, 157, 159; —— lithography, 212. Teyler, Johannes, 249. Thaulow, F., 47. Thoma, Hans, 46, 230, 306. Thomson, James, 151. Three - color processes, 249, 250. Thurston, John, 181. Tiepolo, G. B., 31. Tinkey, J., 178. Tint printing, Lithographic, 224, 225, 231. Tomkins, P. W., 154, 157, 158. Tory, Geoffroy, 175, 176. Toschi, Paul, 77. Toulouse-Lautrec, Henri de, 227, 238, 253. Toyokuni, 196. Transfer paper, Lithographic, 208, 228, 233. Traviès, C. J., 217. Trial proofs. See Proofs. Trowbridge, Vaughan, 144. Truchet, Abel, 48. Turner, Charles, 115, 120, 121, Turner, J. M. W., "Liber Studiorum," 13, 21, 75, 114-118, 120, 126, 127, 140, 141, 269-270, 272, 273; prices, 260; retouching, 280-281; late impressions, 283; his works reproduced by line-engraving, 83, 86, 90, 119.

Ukioye. See Japanese prints. Underlaying, 180. Unger, W., 36, 297. Unzelmann, F. W., 183. Utamaro, 195, 196.

Vaillant, Wallerant, 97. Vallotton, Félix, 193, 253. Vanderhoof, C. A., 21, 43, 236, 272. Van Dyck. See Dyck. Velde, Adriaen, Jan and Esaias van de, 29. Vérard, A. (publisher), 176. Vernet, H., 206, 209. Vernier, Emile, 220. Vernis mou. See Softground etching. Veth, Jan, 232, 302. Veyrassat, J. J., 32. Vial process, 18. Vidal, Géraud, 139, 160. Vierge, Daniel, 172. Villon, Jacques, 47. Vinegar as a mordant, 130. Visscher, Cornelis, 72, 92. Vliet, J. G. van, 27. Voellmy, Fritz, 128. Vogeler, H., 46. Volkmann, Hans von, 231. Volpato, Giovanni, 76. Vorsterman, Lucas, 72, 269. Vostre, Simon (publisher), Voyez, Nicolas Joseph and François, 80.

Wagstaff, C. E., 121. Walker, Fred, 183, 256, 308. Wall-paper, 202, 247, 248. Waltner, Charles, 36, 297. Ward, James, 100, 101, 107, 109, 112, 124. Ward, William, 101, 109, 112, 124, 156. Warner, E. L., 44.
"Wash-out" process, 242.
Washburn, C., 44. Water-marks, 274-275. Waterloo, A., 29. Watson, C. J., 42. Watson, Caroline, 154, 161. Watson, James, 103, 107, 108, III.

Watson, Thomas, 102-103, 106, Watteau, A., 80. Watts, George F., 235. Way, Thomas and Thomas R., 234-235, 303. Webster, H. A., 45. Wechtlin, Johann, 174. Wehrschmidt, D. A. and E., 124. Weir, J. Alden, 44, 56, 236. Weirotter, F. E., 31. Whistler, J. A. M. Summary method, 5, 11; compared with Rembrandt, 23, 25; etchings, 5, 14, 16, 22, 25, 36, 38-41, 271, 273, 281, 282, 295; lithographs, 206, 230-231, 233-235, 237, 238, 253, 254; signature, 126, 279; on margins, 271; work reproduced in wood engraving, 187, 256; prices, 261; por-traits of Whistler, 303. White, C. H., 44, 45, 272. White, Edwin, 236. White, George, 96.
White line in wood engraving. 164, 177, 178, 179; imitated on copper, 267.
Whitney, E. J., 186.
Wickenden, R. J., 237.
Wierix, Anton, Hieronymus and Jan, 69. Wille, J. G., 55, 71, 81-82, 85, Willette, A., 226, 227, 229, 253. Williams, Robert, 98. Witdoeck, Jan, 72. Witsen, W., 47. Woeiriot, P., 77 Wolf, Henry, 189. Wolff, H., 46. Wolgemuth, Michael, 166. Women engravers and etchers. M., Fikentscher, J., Hyde, H., Judkins, E., Kollwitz, K., Moran, M. N., Watson, C., Laukota, H., Paczka, C.

Wood-engraving, 56, 94, 162-

203 (Chapter VII), 256, 266, 270, 275 - 276; used with copper-plates to print tints, 148, 247, 248; relation to the photomechanical processes, 191, 240, 241, 248, 310; for posters, 307.

Woodman, R., 158.
Woollett, William, 82, 83,
84.
Worcester, Albert, 45.

Working proofs. See Proofs. Worlidge, Thomas, 28. Worpswede group, 46. Wright, I. H., 140, 158.

Xylography. See Wood engraving.

Yale, Leroy M., 17, 18, 44, 272. Young, John, 106, 112, 120.

Zasinger, Mathæus, 64.
Zdrasila, Adolf, 193.
Zeeman, Renier, 29.
Zilcken, Ph., 47.
Zinc etching, 241.
Zorn, Anders, 22, 47.
Zwolle, I. A. of (Master of the Weaver's Shuttle), 64

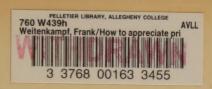






Date Due

SEP 28	188.25	
NOV 4 ! DEC 15		
Ag 1 4 '40 APR 2 '52		
MAY 2 5 '60' APR 2 5 '62		
OCT 28'00		
MAR 28 6	2	
FEB 22 '68		
NOV 12 75		
©		



W439h

